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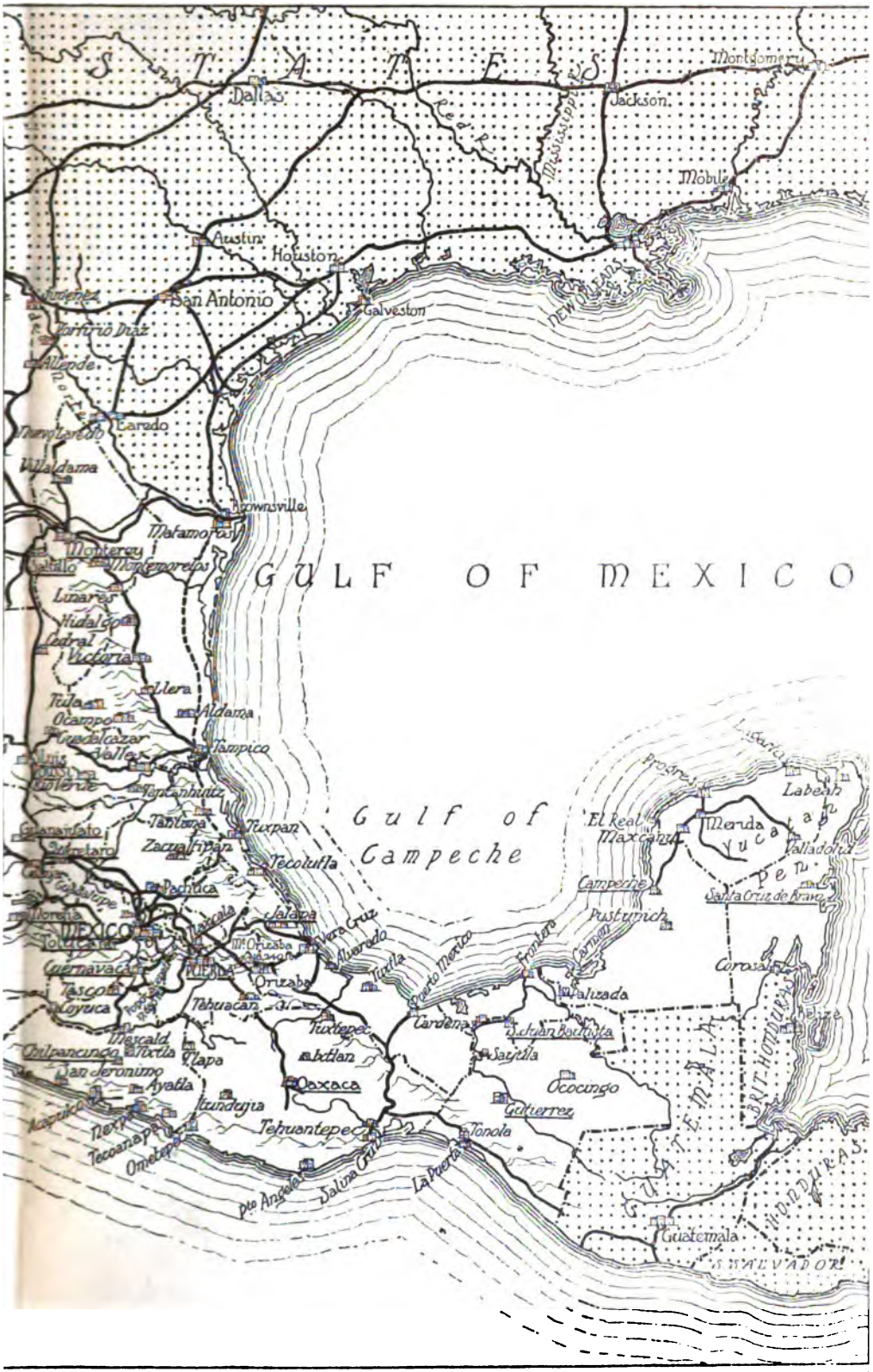
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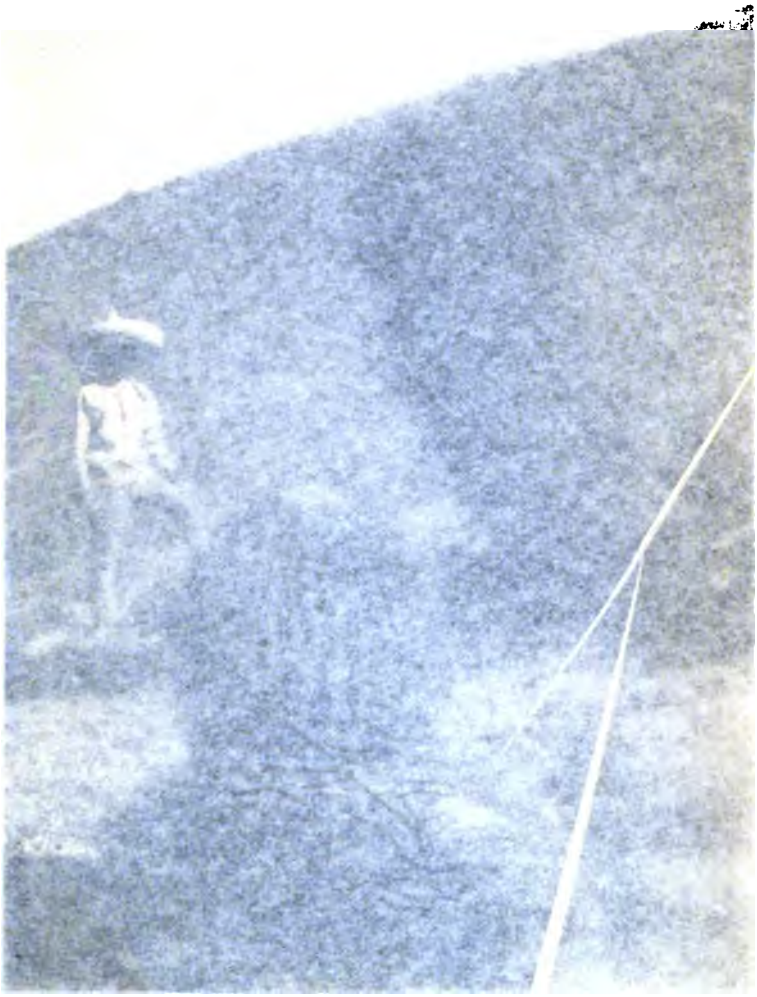
MODERN MEXICO

VISNAGO OR "BARREL" CACTUS

ODERN MEXICO

BY

R. J. MACHUGH



MODERN MEXICO

BY

R. J. MacHUGH

WITH ILLUSTRATIONS FROM PHOTOGRAPHS, A MAP, AND AN APPENDIX CONTAINING THE FULL TEXT OF THE MEXICAN CONSTITUTION

NEW YORK
DODD, MEAD AND COMPANY
1914

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TO

"MY AIN KIND DEARIE, O!"

PREFACE

THE following volume is the outcome of a visit paid to Mexico in the early part of the present year. I had only just returned from the Balkans, where I had accompanied the Servian Army in the war against Turkey, when the editor of the *Daily Telegraph* commissioned me to proceed to Mexico and investigate the conditions prevailing there.

Several of the chapters now included in this book originally appeared in that journal, but these have been, for the most part, rewritten, and some new matter has been added. It was also thought advisable to include an historical sketch, in order that the reader might be able to trace the origin of the Republic and form some appreciation of the causes of Mexican unrest.

In dealing with recent events I may appear to some people to take a too adverse view of the results of the policy and administration of the late President Madero. The conclusions arrived at in this respect were formed only after a careful investigation of the evidence available in Mexico itself. The same remark applies to the criticisms made with reference to the attitude of the United States towards the *de facto* Government of the Republic.

While I have the fullest sympathy with President Wilson's desire to mark his disapproval of the methods by which political changes are brought about in some of the Latin-American States, I am convinced that whatever the ill results that might have flowed from a recognition of General Huerta,

as Provisional-President, by the United States Government, they would have been infinitely less evil than the events which have occurred in Mexico; and there are probably still worse to come.

Whatever view may be taken of the opinions expressed in the course of this work, they are the result of sincere conviction, and are entirely unbiassed; for I have no interests whatever, either financial, political, or social in the Mexican Republic.

I desire to express my indebtedness to the Proprietors of the *Daily Telegraph* for the permission, so readily given, to reproduce the articles which appeared in that journal; to His Excellency the British Minister to Mexico (Mr. F. C. Stronge), the Consul-General for Great Britain in that country (Mr. C. E. W. Stringer), Señor Licentiado Don F. de la Barra, late Mexican Minister for Foreign Affairs, Señor Licentiado Don Rudolfo Reyes, late Minister of Justice, Señor Don Toribio E. Obragon, late Minister of Finance; Señor Licentiado Don Luis Riba, and others, for most valuable information and guidance in relation to Mexican affairs during my stay in Mexico; also to Mr. E. J. Bray, European agent for the National Railways of Mexico, for his assistance with the chapter on Mexican Railways, and for most of the photographs used in the illustration of this work.

R. J. MACHUGH

LONDON, *January* 1914.

CONTENTS

CHAP.		PAGE
I.	ANCIENT MEXICO	1
II.	INDEPENDENT MEXICO	31
III.	PHYSICAL CONFIGURATION	64
IV.	POLITICAL ORGANIZATION	86
V.	MEXICAN CHARACTERISTICS	102
VI.	MEXICAN POLITICS	134
VII.	PRESENT CONDITIONS	159
VIII.	RESOURCES	182
IX.	INDUSTRIES	209
X.	HORTICULTURE	234
XI.	RAILWAYS	243
XII.	MEXICO CITY	268
XIII.	MEXICO AND THE UNITED STATES	280
	APPENDIX—TEXT OF THE MEXICAN CONSTITUTION	299
	INDEX	337

LIST OF ILLUSTRATIONS

VISNAGA, OR "BARREL" CACTUS . . . *Frontispiece*
From a photograph by C. B. WAITE

FACING PAGE

FACADE OF MITLA RUINS 8
From a photograph by C. B. WAITE

GUANAJUATO 26

AN INTERIOR AT MITLA 32
From a photograph by C. B. WAITE

CHAPULTEPEC CASTLE AND PARK, MEXICO CITY . . 42

POPOCATAPETL FROM PUEBLA FORT 54
From a photograph by C. B. WAITE

CARVED STONES, PYRAMID OF THE SUN . . . 66

ARCH AT OZUMBA 76

PEASANT TYPES 112

ARCADE WITH NATIVES, PUEBLA 128

PUEBLA, STREET SCENE 188

AQUEDUCT OF QUERETARO, WITH WATER CARRIERS . . 198

OLD THEATRE, PUEBLA. 216

METLAC BRIDGE AND RAVINE 224

MARKET SCENE, TAMPICO 232

AVENUE OF PALMS 240

ON THE WAY TO MANZANILLO 254

VIEW OF THE ZOCALO AND CATHEDRAL, MEXICO CITY . 268

NATIONAL PALACE, MEXICO CITY 276

INDIAN MEMORIAL ON THE PASEO, MEXICO CITY . . 284

MAP OF MEXICO. . . . . *Front Endpaper*

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MODERN MEXICO

CHAPTER I

ANCIENT MEXICO

Historical sketch—Ancient Mexico—The Spanish Period

WHEN history first begins to occupy itself with the country now known as Mexico, the land was occupied by a number of races, all of which belonged to the so-called red, or copper-coloured branch of the human family, which had peopled the whole American continent before its existence became known to Europeans towards the close of the fifteenth century. Very little is definitely known concerning the tribes which preceded the Aztecs, who were the dominant race when Cortes, at the head of his band of Spanish adventurers, first landed on the spot where now stands the city of Vera Cruz. All that tradition and the labours of numerous scholars and investigators have disclosed is that the Aztecs had conquered and driven out the remnants of two earlier races, the Toltecs and the Chichimecs.

To the former of these is attributed the vast pyramids and stone-built structures whose ruins, in some features not unlike those of ancient Egypt, still astonish the explorer in the Valley of Mexico and amid the forests of Yucatan and Honduras. These ancient builders are believed by some authorities to be akin to the Maya tribes, now inhabiting the peninsula of Yucatan, and who have sunk far down in the

scale of civilization. Their present habitations are, for the most part, flimsy structures of bamboo thatched with palm leaves. They have completely lost all tradition as to the origin of the gigantic structures reared by their predecessors. To the Toltecs is also attributed the origin of the elaborate system of chronology which the Spaniards found in use among the Aztecs on their arrival in Mexico. But although history confines itself mainly to the record of the Toltecs and Aztecs, recent investigation indicates that Mexico was originally the home of a considerable number of distinct peoples belonging to what ethnologists term, for convenience' sake, the "Amerindian" race. And tradition tells that all of them at one period or another came from northern regions far beyond the Rio Grande.

At the present time there are no less than one hundred and thirty-three separate Indian tribes recognized in Mexico. These are arranged under sixteen language groups—the Athapascan, Chiapanecan, Chinantecan, Coahuiltecan, Huavan, Mayan, Nauhuatl, Otomian, Piman, Tañoan, Tarascan, Tequistlatecan, Totonacan, Yuman, Zapotecan, and Zoquean —speaking some fifty-three languages and numerous dialects. The official language of Mexico is, of course, Spanish; but many of the Indians, even in the vicinity of Mexico City, still use the native speech after four centuries of European rule. Several tribes still continue to exist under conditions of almost primitive savagery. Among these are the Apaches in the north, some scattered groups inhabiting remote fastnesses among the mountains and forests of Southern Mexico, those living on the island of Tiburon, and the Yaqui and Seri Indians of Sonora.

The Indians of the central plateau belong to the Nahuatlaca group. They are the direct descendants of the Aztecs, and comprise about one-fourth of the entire native population. Allied tribes speaking the same idiom are also spread over

the western Sierra Madre region from Sinaloa southwards, and over parts of the states of Vera Cruz, Tabasco, Oxaca, Morelos, Aguascalientes, and San Luis Potosi. It was these Nahua-speaking tribes, banded together in the great Aztec military confederacy, which dominated Mexico when the Spaniards landed. They had attained to the highest standard of civilization reached by any aboriginal people on the American continent. They dwelt in large, stone-built towns and cities with regularly laid-out streets and squares; they possessed fine buildings and temples, and a highly complex system of military and civil administration; with official administrators, courts of justice, a remarkable knowledge of agriculture and the mechanical arts, and were skilful workers in metals, leather, and textiles. Their towns had weekly markets to which the country people flocked with the produce of their fields and orchards for sale to the urban inhabitants, and they possessed all the social apparatus of a well-organized state.

The great market of Tenochtitlan, as the ancient capital of Mexico was named, was the centre of animation in the city. "The market was surrounded by deep porticoes, and the several articles had each its own quarter allotted to it. According to Cortes, who was astonished at the multitudes assembled there, the market-place was twice as large as the celebrated square of Salamanca. Here might be seen cotton piled in bales, or manufactured into dresses and articles of domestic use, as curtains, coverlets, and the like. The richly stained and nice fabrics reminded Cortes of the silk-market of Granada. There was the quarter assigned to the gold-smiths, where the purchaser might find various articles of ornament or use formed of the precious metals, or curious toys, made in imitation of birds and fishes, with scales and feathers alternately of gold and silver, and with movable heads and bodies. These fantastic little trinkets were often garnished with precious stones, and showed a patient,

puerile ingenuity in their manufacture, like that of the Chinese.

" In this market were met together traders from all parts with the products and manufactures peculiar to their countries: the goldsmiths of Azcapatzalco, the potters and jewellers of Cholula, the painters of Texcuco, the stonecutters of Tenajocan, the hunters of Xilotepec, the fishermen of Cuitlahuac, the fruiterers of the *tierra caliente*, the mat and chair makers of Quanhtitlan, and the florists of Xochimilco—all busily engaged in recommending their wares and chaffering with purchasers.

" In an adjoining quarter were collected specimens of pottery, coarse and fine, vases of wood elaborately carved, varnished or gilt, of curious and sometimes graceful forms. There were also hatchets made of copper alloyed with tin, which the natives used instead of iron. The soldier found there all the instruments of his trade: the casque fashioned into the head of some wild animal, with grinning defences of teeth and bristling crest dyed with the rich tint of the cochineal; the escaupil, or quilted doublet of cotton; the rich surcoat of feather mail, and weapons of all sorts, copper-headed lances and arrows, and the broad maquahuitl with its sharp blades of itzli (obsidian). Here were razors and mirrors of this same hard and polished material, which served so many of the purposes of steel with the Aztecs. In the square were also to be found booths occupied by barbers, who used these same razors in their vocation; for the Mexicans, contrary to the popular but erroneous notions respecting the aborigines of the New World, had beards, though scanty ones. Other shops and booths were tenanted by apothecaries, well provided with drugs, roots, and different medicinal preparations. In other places, again, blank books or hieroglyphical picture-writing were to be seen, folded together like fans, and made of cotton, skins, or more commonly the fibre of the agave, the Mexican papyrus.

"Animals, both wild and tame, were offered for sale, and near them, perhaps a gang of slaves with collars round their necks, intimating they were likewise on sale. The display of provisions was also an attractive feature of the great 'tianguiz.' There were meats of all kinds, domestic poultry, game from the neighbouring mountains, fish from the lakes and streams, fruits in all the delicious abundance of these temperate regions, green vegetables, and the unfailing maize. There was many a viand, too, ready dressed, which sent up its savoury steams, provoking the appetite of the idle passenger; pastry, bread of the Indian corn, cakes, and confectionery. Along with these were to be seen cooling or stimulating beverages—the spicy foaming chocolatl (chocolate), with its delicate aroma of vanilla, and the inebriating pulque, the fermented juice of the aloe. All these commodities, and every stall and portico, were set out or rather smothered with flowers. . . . It resembled, indeed, the periodical fairs of Europe, not as they now exist, but as they existed in the Middle Ages" (Prescott's *Conquest of Mexico*).

This spirited description of a market in the ancient Aztec capital at the period of the first visit of Cortes is in many respects applicable to the great central market of Mexico City at the present day; only the jewellers and metal-workers are absent. There is the same medley of articles offered for sale. Nowhere, except perhaps in the cities and towns of China, is there such a variety of ready dressed viands of all kinds offered to the passenger; and the profusion of blooms shows that, however they may have altered in other respects, the Mexicans still retain their passionate love of flowers.

The religion of the Aztecs was an idolatry whose worship was accompanied by gloomy and savage rites. The Spaniards estimate that in Mexico seventy thousand human victims were annually offered to Huitzilopochtli, the tutelary deity and war-god of the Aztecs. A colossal image of this horrible

object of worship occupied the summit of the great Teocalli or pyramid in the centre of the city. In front of it was the sacrificial stone, an immense block of jasper, on which the victims were immolated. This identical stone is now preserved in the National Museum. A dreadful and disgusting feature of the worship of Huitzilopochtli was the cannibalism that accompanied it. The victims were usually prisoners of war. When offered in sacrifice, the chest of the victim was opened by the chief priest with a blow from an obsidian knife, and the still palpitating heart torn out and flung at the feet of the war-god. The body was then given to the soldier who had captured it in battle, to be carried away and made the feature of a horrid feast, in which even the women participated.

Prescott thus describes the image of the god in whose honour these sacrifices were offered: "His countenance was distorted into hideous lineaments of symbolical import. In his right hand he wielded a bow, and in the left a bunch of golden arrows, which a mystic legend connected with the victories of the people. The huge folds of a serpent, consisting of pearls and precious stones, were coiled round his waist, and the same rich materials were profusely sprinkled over his person. On his left foot were the delicate feathers of the humming-bird, which, singularly enough, gave its name to the dread deity."

Opinions may vary as to the benefits, or the reverse, which the Spanish Conquest conferred upon the people of Mexico, but at least it may be claimed for Cortes and his soldiers that they freed the people of Mexico from a cruel and bloody worship that yearly exacted an appalling toll of human life and substituted for it a purer and a higher faith.

The early history of Mexico, so far as it is known, presents features similar to that of other countries. There is the same record of warring dynasties, of invasions, conquests, revolts, and intrigues; of inspired, Heaven-sent teachers; of strange

faiths, and weird, mystical legends as to the creation of the world and the origin of mankind. The "Popol-Vuh," a remarkable collection of traditional lore compiled in the ancient Quiché kingdom of Guatemala, and translated into Spanish by Father Ximenez about the year 1700, embodies many of the Indian legends about the creation of the world. According to it, there was in the beginning only the heavens above with their boundaries towards the four winds, and below the calm and silent sea. Then the four creators commanded the earth to appear, and it rose above the waters; vegetation appeared, and the forests were filled with birds and beasts. Man was made at first of clay, which dissolved in the waters and disappeared; then of wood, which was destroyed by floods poured down from the heavens. Finally, four men and their wives were created, and these became the ancestors of the Quichés. This Guatemalan legend, mythical as it is, has some importance from the historical point of view. Its story of the creation is evidently influenced by matter learned from white men, but it mentions Gucumatz, the "Feathered Serpent," which is obviously derived from Mexican sources, and it includes tales of wanderings and mention of geographical names familiar in the traditions of Aztec migrations. For this reason, and because of the physical likeness existing between the different races, anthropologists have felt themselves justified in grouping the whole of the races of the southern portion of the North American continent and also of districts beyond the Isthmus of Panama under one head.

The Aztec picture-writings, which in many respects resemble the hieroglyphics of ancient Egypt, contain material of considerable historical value. From these, aided by oral tradition, it is learned how the Aztecs, coming down from the north, wandered from place to place, finding but scanty welcome from the other Nahua-speaking peoples already

settled on the central plateau. After many wars they finally subdued the remnants of the Toltecs, enfeebled and degenerated, it is said, by generations of over-indulgence in pulque, the intoxicant which they obtained from the juice of the giant cactus that flourishes all over the tierra templada. This same pulque, which is still drunk in enormous quantities, is even now exercising a baneful influence upon the Mexican people, and is a potent factor in the degeneracy and criminality of the lower classes of the population. According to the native chronicles, the Aztecs first made their appearance on the Mexican plateau about the twelfth century, at the close of a period of drought, famine, and pestilence, which had almost entirely destroyed their predecessors, the Toltecs, who are supposed to have occupied the land for about five hundred years. The numbers of the new arrivals cannot, at first, have been very large, because they do not seem to have been able to establish themselves firmly until a comparatively brief period before the arrival of the Spaniards. Even at this latter period they were engaged in constant warfare with the Tlascalans in the east and the Miztecs in the south-east.

Mexico City, or Tenochtitlan, as it was called by the Aztecs, was founded in the beginning of the fourteenth century, on the shores of one of the four salt lakes which then occupied a large portion of the Valley of Mexico. These lakes have since shrunk greatly in extent, and the city, which at first resembled Venice in the number of canals which served the purpose of thoroughfares, is now four miles from Lake Texcuco. Its situation, no doubt originally chosen for the purposes of defence, was low and unhealthy and subject to frequent inundations. The only means of access was by boats, or along the four great causeways raised above the waters of the lake and strongly defended by towers and gates. It was along the northern of these causeways that the Spaniards retreated after their first occupation of the Aztec capital. The night

FAÇADE OF MITLA RUINS

of the retreat is known in Mexican history as "La Noche triste," or night of melancholy, from the terrible losses sustained by the Spanish forces as they fought their way along the narrow path to the mainland.

Almost everyone, at some time or other, has read the *Conquest of Mexico*, in which Prescott, in a work that has become a classic, traces the story of the wonderful adventure by which a handful of Spaniards, under Hernando Cortes, conquered for Spain an empire which at one period extended from the Isthmus of Panama to what is now the frontier of Canada, and from the Mississippi to the shores of the Pacific Ocean. Cortes, having set out from the island of Cuba, landed in Mexico on Good Friday, April 21, 1519. His entire force consisted of four hundred foot soldiers and fifteen horsemen with seven small pieces of artillery. Making allies of the Totonacs, and afterwards of the Tlascalans, who were bitter enemies of the dominant Aztecs, Cortes burned his ships, and, setting his face inland, marched towards the capital. Partly from fear and partly as the result of legendary native traditions which predicted the coming of bearded white men from the east, the Spanish commander and his troops were permitted to enter the city of Mexico without resistance. Montezuma, the Aztec emperor, himself came out to welcome the strange visitors from beyond the seas whose advent had fulfilled the ancient prophecies. The Spaniards were accompanied by about seven thousand Tlascalans and Totonacs, hereditary foes of the Mexican empire. The presence of these was deeply resented by the haughty Aztecs; but the influence of the white men was sufficient to prevent any acts of hostility. Cortes remained for some months in the city, when he returned to the coast, leaving Alvarado, one of his captains, in charge of the small garrison.

The Aztec sovereign and his brother were at the time virtual prisoners in the hands of the Spaniards. They had

been seized by Cortes as hostages against treachery on the part of the Mexicans, who had become hostile owing to the greed and arrogance of the Spaniards, who, among other acts of intolerant rapacity, had seized the national treasure. During the absence of Cortes at Vera Cruz an incident happened which exasperated the natives beyond endurance. It was customary during the month of May to hold a great festival in honour of the war-god Huitzilopochtli. In connexion with this feast about six hundred of the leading chiefs and warriors of Mexico assembled in the courtyard of the great Teocalli, dressed in their most magnificent costumes. Alvarado and his soldiers were present as spectators, probably to keep a watchful eye on their royal prisoner, Montezuma, who attended the festival at the request of his nobles. No real reason or explanation has ever been given for what followed. According to Prescott's narrative, the festival was at its height when " Alvarado and his men, at a preconcerted signal, rushed with drawn swords on their victims. Unprotected by armour or weapons of any kind, they were hewn down without resistance by their assailants, who showed no pity or compunction. . . . Not an Aztec, of all that gay company, was left alive. On this sad day fell the flower of the Aztec nobility. Not a family of note but had mourning and desolation brought within its walls."

In consequence of this terrible massacre, the Mexicans attacked the Spaniards, but were repulsed with great loss. The siege of the Spanish quarters was maintained for a fortnight, until Cortes arrived with reinforcements. He was permitted to rejoin his comrades without opposition, probably in order that there might be more numerous victims for that sacrifice. The attack was then renewed with great ferocity. Cortes held out for a time, but eventually decided to evacuate the city and retire to the coast. This operation was carried out with frightful losses on the night of July 1, 1520. The causeway—now a leading thoroughfare of Mexico City—along which the

Spaniards and their Tlascalan allies fled on "La Noche triste" is still known as the "Calle del Puente de Alvarado," in memory of the famous leap made by that officer across one of the gaps which the Aztecs had cut in the roadway. Many of the Spanish soldiers lost their lives during the retreat, not by the weapons of the enemy, but through falling into the salt floods of Lake Texcuco while overladen with plunder, Cortes having given them permission to take as much gold as they wished from Montezuma's treasure before leaving the city. The Aztec monarch had died a few days before the retreat from a wound inflicted by his own people in the attack on the Spaniards.

Cortes, having recruited his forces, returned and captured the city after a bloody siege of nearly three months' duration. With the fall of the capital the Aztec kingdom disappeared for ever, and the country passed under the dominion of Spain. The conquest of Mexico by Cortes, when the scantiness of the means at his disposal is considered, remains one of the most remarkable feats in military history. His victories over overwhelming numbers appear almost miraculous; but it must be remembered that the great object of the Aztec soldiers, against whom the battles were fought, was not to kill but to capture their enemies. For generations the main purpose of the wars which they waged with neighbouring nations was the acquisition of prisoners to satisfy the ever-pressing demands of the priests for human victims to sacrifice to their bloodthirsty war-god. So far was this practice carried that the king himself could not be crowned until, with his own hands, he had captured victims in battle to be slain on the sacrificial altar. When the Aztec warriors encountered the Spanish soldiers clad in mail and armed with steel swords and firearms their obsidian-studded clubs and puny arrows were of little avail. Above all, the cavalry, which the Mexicans encountered for the first time, filled them with superstitious terror. They believed the horse and his rider

to be one strange, superhuman being; and the early battles were often mere butcheries, in which the Spaniards slew till they were weary of killing, while they themselves sustained only trifling losses.

The Spaniards, whose conquest of Mexico was undertaken mainly for the purpose of obtaining gold and silver, were vastly disappointed in the amount of booty they secured in the captured city. Native tradition states that vast treasures were sunk in the waters of the lake so as to disappoint the conquerors. The bottom of the lake for miles round the capital is now dry land, and search is still made for the lost wealth. Now and then some piece of gold or jewellery is turned up in the soil, but the great treasure remains undiscovered.

From the completion of the Conquest in 1521 down to 1821, when the last Spanish viceroy, General Juan O'Donoju, was forced to resign, and Mexico regained her independence, is known as the Colonial Period. During these three hundred years the country was ruled by a succession of five governors (1521–28), two Audiencias (1528–35), and sixty-four viceroys (1535–1821). The viceroys, wise or foolish, good or bad, ruled Mexico absolutely, with responsibility only to the King of Spain and the Council of the Indies. Spain was very far away, communication by sailing ship—the only means—was slow and precarious, and the Viceroy of New Spain could administer the vast territory committed to his charge practically as he willed. The only check upon his arbitrary power was the authority of the prelates of the Catholic Church which was established in Mexico immediately after the Conquest. Where the Viceroy and the bishops worked hand in hand, as was mostly the case, the Mexican people were between the upper and the nether millstones, and were ground without mercy for the benefit of the Viceroy, the Church, and the Spanish Crown. The trio did not fare badly out of the process. Many of the viceroys who left Spain with dilapidated fortunes returned

with ample wealth from Mexico. The Spanish Crown had its share, but the Church reaped the richest harvest. At the close of the Colonial Period it owned nearly three-sevenths of the entire wealth of the country. In justice, however, it must be added that the Catholic religious orders, especially the Franciscans and the Jesuits, were powerful factors in the exploration and civilization of the new territories. But the record of Spanish government in Mexico taken as a whole is one of the oppression and subjection of the unfortunate Indians.

The viceroys were for the most part Spanish nobles, and favourites of the Court, but several were prelates. Some of them were wise and just men, who endeavoured to rule fairly and to protect the natives. Among these the first viceroy, Antonio de Mendoza, Conde de Tendilla, Leon de Velasco, his successor, Fray Paya Enriquez de Rivera (Archbishop of Mexico), the Marquis de Casafuerte (the only American-born viceroy), Antonio Maria de Buccareli (forty-sixth viceroy),and the Conde de Revillagigelo (fifty-second viceroy), stand out conspicuously for their efforts to rule the country in the interests of its inhabitants. Buccareli (1771–79) in particular left a name that is still revered and whose influence is yet felt in Mexico. He died in office on April 9, 1779, but the people to this day relate tales of his wisdom, kindness, and justice. He was a far-seeing and benevolent administrator, who did much to develop the resources of Mexico, and carried out more civic reforms than all the viceroys who preceded him. It was he who made possible the alteration in internal administration by which local government was removed from the hands of the " Alcaldes Majores " and " Corrigidores." Both these classes of officials were appointed by purchase from the time of the Conquest till 1786, a system which opened the way to great abuses and almost compelled the incumbents of these offices to resort to oppression and injustice in order

to recoup themselves for their outlay in purchasing their appointments.

Immediately after the Conquest the land was divided among the conquerors, the natives being allotted with it as serfs. Antonio de Mendoza, the first viceroy (1535–50), a humane and benevolent man, endeavoured to mitigate the hardships of the enslaved natives. He was much influenced in this policy by the advocacy of the famous missionary Fray Bartolomé de las Casas, known in Mexican history as " The Protector of the Indians," who urged their liberation from the condition of bondage in which they had been placed by Cortes and the conquerors. The policy of de Mendoza in this matter was followed by his successor Luis de Velasco, who emancipated 150,000 Indians and distributed among them a portion of the Crown lands. This measure for the relief of the natives so exasperated the tyrannical and greedy Spanish landowners that, failing to secure its reversal by the King of Spain, they organized a conspiracy to sever the Spanish connexion and set up the son of Cortes as King of Mexico. When this scheme was discovered, the attempted revolution, the first of the many that have racked Mexico, was suppressed with great severity and several of the conspirators were executed and their lands confiscated.

De Velasco left a permanent mark on the new colony. Besides his measures for the welfare of the native tribes he founded a university, the first on the American continent, established a royal hospital, and sent a number of expeditions into the northern territories to pacify and civilize the nomad and savage tribes which roamed over those regions. These attempts, however, were not attended with much success, and the remnants of the Apaches, Yaquis, and other northern tribes have even yet been only partially civilized. During de Velasco's term of office the first attempt was made to protect the capital against the periodical inundations to which it

was subject. With this object, the great dyke of San Lazaro was built and is still in existence. He also founded the towns of Silao, Durango, and San Miguel de Allende, and the famous silver mines of Fresnillo and Sombrerete, which are still productive, were discovered by one of his captains. These discoveries, and the still richer silver mines of San Luis Potosi, disclosed between 1580 and 1584, had the effect of directing attention to the fabulous mineral wealth of the country. For centuries the main energies of the Spaniards were directed to the search for the precious metals, to the neglect of the more certain but less alluring sources of wealth which lay to hand in the fertile soil and wonderful forests, filled with rich cabinet and dyewoods and most valuable medicinal plants, that covered immense areas of the country. Indeed, it is only within the last twenty or thirty years that any real attempt has been made to develop the inexhaustible agricultural and forest resources of Mexico. Minerals, especially gold and silver, alone were sought after, and the country barely produced food enough for its inhabitants. In a land capable of producing all the cereals and fruits of the tropical and temperate zones, famines repeatedly occurred. Bread riots, almost approaching revolution in severity, such as those of 1692, were of frequent occurrence. So far was the neglect of the soil carried that the wise Bishop Zumarraga found it necessary to issue a warning and to point out that " if the tilling of the soil is neglected, to engage solely in the working of the mines, the ruin of the country is certain."

The tales that reached Europe of the fabulous wealth of Mexico, from which all but Spaniards were excluded, attracted sea rovers and freebooters from other countries to prey on the rich commerce that passed between the new colony and Spain. Conspicuous among those, in the sixteenth century, were the English seamen Hawkins and Drake, half pirates, half traders, who scoured the Spanish Main in search of the rich

silver galleons bearing the produce of the Mexican mines to Europe. In 1568 Hawkins seized the little island of Sacrificios (so called because the natives used to resort there to offer sacrifices to their gods), within sight of Vera Cruz. Hawkins was surprised on the island by the Spanish fleet escorting the new viceroy, de Almansa, and the Englishman just managed to escape with Sir Francis Drake, but lost all his other ships. Four years later, and again in 1578, Drake took revenge for the defeat. In 1587 Cavendish captured the so-called Manila Galleon, laden with spices from the Philippines and silver from Mexico to the value of over a million sterling. During the seventeenth century the Dutch took an active part in the attacks on Spanish commerce. Again and again richly laden galleons were captured, and the harbours and coast towns of Mexico and Central America were repeatedly looted. In May 1683 van Horn and Laurent captured Vera Cruz, committing terrible outrages and carrying off everything of value. The Pacific coast of the colony was swept clean a few years later by Dampier and Sevan, and twice during the first half of the next century the Manila Galleon was seized—by Woodes Rogers in 1709 and by Anson in 1743.

By the Treaty of Utrecht Great Britain obtained the privilege of trading with the Spanish possessions in the New World, but piracy in the Caribbean Sea and the Gulf of Mexico still went on, though it had lost the half-concealed official encouragement given by the English and Dutch Governments in earlier times.

During all this period one of the chief preoccupations of the Spanish administrators in Mexico, apart from the exploitation of the mines and the protection of the coast towns and the trade with Spain, was the guarding of Mexico City against inundation. Situated on the lowest of the five lakes that lay in the Valley of Mexico, the capital was only raised four feet above the level of the waters. For months at a time its

streets were under water, and the question of removing the city to a higher site was repeatedly under consideration. The landowners, however, were successful in their opposition to this plan, and vast sums were expended in the construction of tunnels to carry off the superfluous waters, and dykes to hold them in restraint. Some of these works were of great extent and displayed considerable engineering skill. The drainage of the lakes and the consequent removal of the danger of inundation, attempted first by the Aztecs as far back as 1449, nearly one hundred years before the Conquest, was not finally accomplished until the end of the last century. The final works were begun during the short reign of the ill-fated Emperor Maximilian, but owing to the troubled internal condition of the country were only pursued intermittently until 1879. At that time President Diaz was in power, and Mexico, for the first time almost in her history, enjoyed comparative tranquillity. In 1879 improved plans were prepared for digging a great canal, thirty miles long. In 1885 the work was undertaken by an English firm (Messrs. S. Pearson & Son), and was practically completed by 1896, though the formal inauguration did not take place till 1900. The canal begins on the eastern side of the city, near the San Lazaro Gate, and traverses the valley in a northerly direction between the Guadalupe hills and Lake Texcuco. It crosses there lakes, is carried under the Xalpan mountains by a tunnel ten kilometres in length, and finally terminates near the town of Zumpango in the State of Mexico.

This great work, which effectually removes all further danger of inundation, is a very fine piece of engineering. It was carried out at a cost of sixteen million pesos, and the city sewage system, of which the canal is an integral part, cost an additional six millions. One curious effect has been observed since the completion of the drainage system. Owing to the removal of the subsoil water which saturated the strata beneath

the city, the larger buildings are sinking into the layer of peaty material lying below the foundations. This subsidence had been noticed at an earlier period, but its rate has increased since 1900, and many of the heavier structures, such as the Cathedral and the School of Engineering, show conspicuous fractures and differences of level in their façades. A similar phenomenon is noticeable in the case of the great buildings along the banks of the Neva in St. Petersburg, and the problem of how to prevent its continuance is one that has not yet been solved by engineering science.

The Colonial Period came to an end in 1821 when Mexico achieved her independence. One peculiar feature which marked its continuance must be referred to before the events of the republican era are taken into consideration, because a large proportion of the political unrest which followed the change was directly due to it. This feature was the remarkable authority and influence which the Catholic Church wielded in Mexico from the Conquest until the suppression of the religious orders, and the disestablishment of the Church by President Juarez in July 1859. Property of enormous value had accumulated in the hands of ecclesiastics, who wielded a corresponding power, financial, social, and political, too frequently exercised for reactionary purposes. Quite early in the seventeenth century conflicts arose between the regular and the secular clergy over a question of tithe and the control of the Indians, and both of these classes of ecclesiastics had frequent quarrels with the Viceroys. The Marquis de Gelves, an energetic reformer, who was Viceroy from 1621 to 1624, in the first year of his office had a violent dispute with the Church authorities because he was in favour of appointing regulars to control the natives. The Archbishop of Mexico (Serna), excommunicated the Viceroy, laid the capital under an " interdict," and by an appeal to the prejudices and superstitions of the populace raised so much opposition to the King's

representative that he was obliged to fly and hide himself from the fury of the mob which sought his life.

The Archbishop was successful in crippling the authority of the Viceroy, and prevented the proposed changes. Meanwhile, the power and wealth of the Church continued to develop until in 1644 it was estimated that nearly one-half the total wealth of the country was owned by the religious orders. In that year Philip IV of Spain was appealed to by the Ayuntamiento of Mexico to stop the foundation of religious houses and to suspend ordinations on the ground that there were already six thousand unemployed priests in New Spain and that the country could not support any more. Feast days and holidays had been so multiplied that, including Sundays, they left barely two hundred working days in the year, with the result that the economic condition of the country was beginning to suffer. The squabbles between the regular and the secular clergy continued. The main cause of contention was with reference to which should have control of the unhappy natives. The Bishop of Puebla, Juan Palafox y Mendoza, who held the office of Viceroy for five months in 1642, availed himself of his tenure of power to transfer many native congregations from the religious orders to secular priests. He presently found himself in conflict with the Jesuits, whom he forthwith excommunicated. The Jesuits appealed to Rome, and securing the support of the Dominicans and of the Archbishop of Mexico, who was none too well satisfied with the exercise of the supreme power by his subordinate, they succeeded in triumphing over the Bishop of Puebla.

It is generally conceded that the work of the Jesuits in Mexico was, on the whole, highly beneficial. They almost invariably had the support of the Creoles—that is, the people of pure European descent born in Mexico, as distinguished from the Spaniards of European birth—who always obtained

the grant of the best and fattest offices in the colony. The great event of the eighteenth century, from the ecclesiastical as well as from the political point of view, was the expulsion of the Jesuits from Mexico, as from all other Spanish dominions, in 1767. The members of the great order were arrested *en masse* during the night of June 26; all their property was confiscated, and they themselves deported under circumstances of some harshness to Cuba, then to Spain itself, and finally to Corsica. They had done much to civilize and develop Mexico and for the education of the white population. Their expulsion aroused feelings of great resentment, especially among the Creoles. It increased the already widespread discontent with Spanish rule which broke out in open rebellion forty years later.

From this same incident may also be dated the decline of the power of the Church and with it that of the Spanish Crown in Mexico. Most of the great ecclesiastical offices had always been filled by Spaniards. The jealousy and hatred of the Creoles for the Spanish immigrants who obtained all the best places in Church and State could hardly be directed against the individuals without in some degree affecting the institutions which they represented. The overthrow of the Jesuits who had filled so large a place in Mexico could not be accomplished without creating the impression that the Church itself, with which this important order had been so long identified in the minds of the people, was not possessed of the sacred and superhuman attributes with which the teachings of the clergy and their own traditions and superstitions had endowed it. Spain had set up and maintained the Church in Mexico, and when the Spanish power fell, the power of the Church, though maintained with various vicissitudes for a generation, also disappeared with the establishment of Mexican independence.

Strangely enough, two of the heroic figures in the revolution against Spain, which began in 1810, were priests—Miguel

Hidalgo, a Creole, and José Maria Morelos, a Mestizo, or half-bred Indian. But they obtained no countenance or support from the ecclesiastical authorities. On the contrary, the Bishop of Michoacan fulminated an edict of excommunication against all insurgents, and Archbishop Lizana supported this by issuing a pastoral letter in which he sought to refute the principles upon which Hidalgo justified the revolution. All the Spanish and Creole clergy were ordered to read the pastoral in their churches and to proclaim from the altar in the most solemn manner that the real object of the revolution against Spain was the subversion of the Catholic Church. The Inquisition also intervened, and Father Hidalgo was accused of every offence known to that powerful tribunal.

For eleven years the War of Independence was waged with varying fortunes before Mexico at last succeeded in breaking the bonds that bound her to Spain. The struggle for freedom really had its inception during the viceroyalty of Señor José de Iturrigaray (1803–8). For many years before the power of Spain had been declining and her grasp on her vast possessions in the New World gradually relaxing. The French Revolution and the Napoleonic wars had overthrown the old order of affairs in Europe. Spain, like other nations, had been drawn into the maelstrom, and had neither the will nor the power to pay much attention to her American colonies. Carlos IV had abdicated in favour of Ferdinand VII, and he, in turn, was driven to vacate the Spanish throne in favour of Joseph Bonaparte. Spanish statesmen and patriots were too much concerned with the internal affairs of the kingdom at home to care much about what was happening across the Atlantic. Mexicans, animated by the example of the South American colonies, where repeated revolts against Spanish rule had broken out, began to take heart and to form dreams of independence.

Iturrigaray, the Viceroy, looking to the condition of the

mother country, and aware of the new spirit that was growing among the Creoles and Indians, conceived the idea of founding a dynasty, and proposed that Mexico should control its own destinies with himself as king. He convened a meeting of the leading men of the country, at which his suggestion was approved. The Mestizos and Indians were easily won over. Their condition of misery and subjection made them willing to hail any change with alacrity. But the grip of Spain was not to be easily broken. The Guchapines, as the immigrant Spaniards were named, had control of all the resources of Government, and they commanded the powerful support of the Church. Before the Viceroy could complete his plans for converting Mexico into an independent kingdom, he was suddenly seized by the Spaniards and thrown into the fortress of San Juan de Ulua on the island of that name in the harbour of Vera Cruz. That same fortress has been the prison of many a political prisoner from the earliest days down to less than a year ago, when it held Generals Felix Diaz and Bernardo Reyes for a time after the collapse of the first revolt against President Madero in the late autumn of 1912.

The deposed Viceroy was detained in San Juan de Ulua for some months, and was finally deported to Spain in 1808. With the arrest and deportation of Iturrigaray the attempt at independence seemed crushed, but it was nursed and cherished in secret. During the next two years three Viceroys held the reins of power in Mexico. These were Pedro Garibay, nicknamed "The Revolutionist," Archbishop Lizana, and Pedro Catani, who ruled for a few months in 1810 as President of the Audiencia. With the coming of Francisco Javier Venegas began the revolutionary period which terminated in 1821 under his successor Francisco de Novella, who is generally regarded as the last of the viceregal line, because General Juan O'Donoju, Captain-General of New Spain, who reached Vera Cruz in 1821, never exercised any real authority, and

died in Mexico City on October 7 in that year, from an attack of pleurisy which he contracted when his vitality had been reduced to a low ebb by the worries of his situation and his chagrin and disappointment at the collapse of the Spanish power.

After the disappearance of Iturrigaray, although the country remained quiet for a time, independence became the ideal of all classes in the community except the Spanish immigrants. Pure whites of Spanish descent born in the country were as fervent Mexican patriots as the Mestizos and the Indians, and were the chief leaders in the events that ensued. During the two years that elapsed before the outbreak of the revolution the movement was carried on in secret by clubs and societies formed ostensibly for social purposes or for the study of the arts and sciences. One of the chief organizers of the movement was Miguel Hidalgo, parish priest of Dolores, to whom reference has already been made. He was born in Mexico, and had reached the age of sixty years when he uttered the famous "Grito de Dolores" (or cry from Dolores), which became the battle-cry of the insurgents, and is still annually recited from the balcony of the National Palace in Mexico City by the President of the Republic on the evening of November 15.

Hidalgo is described as a man of upright and energetic character, who possessed great influence over the Indians of his district. Of a practical turn of mind, he had made numerous attempts to elevate and improve the condition of the natives, and had endeavoured to set up various industries. These had been deliberately suppressed by the Spaniards, who, among other acts of oppression, had destroyed a little silk industry which the priest had started, and cut down the mulberry trees planted for feeding the silkworms. When the insurgent movement began to take shape, Hidalgo did not waste time in mere propaganda. He undertook the manufacture and preparation of arms, organized the Indians, and secured the co-operation

of a number of influential persons, among whom was the Mayor of the capital of the adjoining State of Querétaro and some of the officers of a Spanish regiment stationed there. Among these were two captains, named Allende and Aldama, who afterwards filled prominent positions in the first revolutionary army.

Hidalgo's plans contemplated a rising in December, but very early in the month of September one of the conspirators, Mariano Galvan by name, disclosed the plot to the postmaster of Querétaro. This official made all haste to the capital and revealed the intentions of the revolutionaries to the Government. The Mayor of Querétaro learned on the night of the 13th what had happened, and information was at once sent to Hidalgo. The messenger arrived in Dolores at two in the morning. At once the heroic priest rose from his bed, and at early mass, to which a great congregation had been summoned by an alarm rung upon the famous "Bell of Independence" (now preserved in the National Palace in Mexico City), Hidalgo made a moving appeal to the easily stirred throng in the church, most of them Indians and Mestizos. He reminded them of their long subjection, and of the cruelties inflicted upon them by the Spaniards; how the peaceable inhabitants of the towns and villages had been oppressed, how fields and crops had been ruined, the people's savings stolen, and, worst of all, the sanctity of their homes violated and the honour of their women outraged. Then he told them that Spain was no longer Spanish, but French; that the hour had come for Mexico to be free; and concluded with the famous "cry," which may be translated: "Long live our Most Holy Mother of Guadalupe! Long live America, and death to bad government!" [1]

[1] For the benefit of the "heretic" reader, it may be explained that "our Most Holy Mother of Guadalupe" is a name under which special reverence is paid to the Blessed Virgin Mary throughout Spanish America. The mother of our Redeemer is said to have appeared to an Indian at Guadalupe,

Hidalgo, aware of the peculiar psychology of the Indian mind, wished to link up religion with the political struggle, and had planned his rising for December 12, the date on which the Indians resort to Guadalupe for the great annual *fiesta*. Foiled in this by the treachery of Galvan, he endeavoured, nevertheless, to associate the name of the Virgin of Guadalupe with the movement. When his army was passing the Church of Atotonilco, on its first march, the patriot priest took from the building a banner on which was painted a picture of the Virgin. Affixing it to his lance, he declared it to be the flag of the Army of Independence, and promised his superstitious followers that under the patronage of so powerful a protector their victory was assured. The Indians were filled with rejoicing at the omen, and marched forward with enthusiasm. Their hopes were still further raised when, on reaching the town of San Miguel, at the end of the first day's march, the regiment to which Captain Allende belonged threw in its lot with the insurgents. Celaya surrendered on the 21st, without resistance; but a sanguinary encounter took place at Guanajuato, the second richest city in Mexico, with a population of 80,000, and situated close to the greatest silver-producing mines in America. The Spaniards and the provincial militia fought with great determination, but the insurgents, armed mostly with slings, bows and arrows, and machetes, overwhelmed them by sheer weight of numbers, and drove them out of Guanajuato. The survivors of the Spanish force took refuge in the castle of Grenaditas; but it also was captured and the entire garrison massacred, despite Hidalgo's efforts to restrain

a few miles from Mexico City, in 1531. The place has been for over three hundred years the scene of the most popular pilgrimage in Mexico, and is held in great veneration, especially by the Indians. According to profane history, the hill where the apparition is said to have appeared was, before the Conquest, the site of a temple dedicated to a heathen goddess whose function it was to preside over the growth of corn and to promote the fertility of the earth. The traditions of the spot have, therefore, been preserved under the new dispensation.

his infuriated followers. The insurgents found treasure to the amount of five million pesos in the castle, and, following the gold probably, most of the local militia promptly deserted to the rebel standard. Hidalgo set up a mint and, strangely enough, coined money in the name of Ferdinand VII of Spain. From Guanajuato Hidalgo's army marched to Morelia. The townspeople declared for independence, but the Bishop and the civil authorities fled.

At this time Hidalgo had an army of over 80,000 men at his disposal. It was, of course, only an undisciplined aggregation of half-clad peasants without artillery, and armed for the most part with machetes and home-made lances. By this time the Viceroy realized the seriousness of the insurrectionary movement, and hastily collecting all the available troops, he dispatched them against the insurgents. At the same time he issued a proclamation stating that any rebel captured with arms in his hands would be shot within fifteen minutes, "without the benefit of the clergy." Hidalgo paid no heed to the proclamation, and showed his contempt of the fulminations launched against him by the Spanish bishops by appropriating for the use of his troops large sums from the treasury of Valladolid Cathedral.

The Royal Army was encountered at Monte de las Cruces, and sustained a crushing defeat at the hands of Hidalgo's raw levies, who charged with reckless bravery. At this time it looked as if the rebellion must succeed. If Hidalgo had possessed any military capacity, he might easily have captured Mexico City, and made himself master of the country. The inhabitants of the capital were panic-stricken, and everything was in confusion and disorder in the Spanish ranks. Hidalgo failed to seize the opportunity. He marched his army to within fifteen miles of the city, where he halted, and sent in a demand for its surrender. To this the Viceroy vouchsafed no reply. While awaiting an answer to his message, Hidalgo

GUANAJUATO

learned that a Royalist force of 10,000 men, under General del Rey, was moving in his rear; and probably fearing to be caught between this army and the Viceroy's troops in Mexico City, he retired into the country.

This move on the part of the inexperienced clerical leader was fatal to his cause. His troops, like all raw armies, lost confidence once they began to retreat. Del Rey encountered them on November 7, and scattered them to the winds with a loss in killed alone which is said to have exceeded the total number of the Spanish force. In the earlier part of the battle the insurgents fought with bravery, charging up to the very muzzles of the guns, and, so it is recorded, attempted to prevent them being fired by thrusting their sombreros into the muzzles. The fate of the poor, ignorant peons who tried this strange manœuvre, together with the dreadful carnage in the dense masses of the insurgents when the guns were fired, caused a panic in their ranks, and they broke and fled in all directions.

This battle practically ended Hidalgo's rebellion. He himself with a remnant of the insurgent army fled to Guadalajara, where he attempted to organize a Government. Meanwhile, General del Rey marched to Guanajuato, which he seized. Frightful excesses were committed in the city by the Royalist soldiers in revenge for the massacre of the garrison in the castle of Granaditas. According to the report, over 14,000 of the inhabitants of Guanajuato were butchered by del Rey's troops. Hidalgo does not appear to have made any further serious attempt to meet the Spaniards in the field. He contented himself with the promulgation of decrees reforming various abuses and grievances. An agent whom he dispatched to the United States was captured, and the insurgent plans were disclosed to the Royalist commander. The rebel army had all this time been melting away. They could not be fed; and the first impulse which had carried them to the early successes had spent itself. No fresh

victories were gained to inspire them to renewed effort. Instead, a new defeat at Puente de Calderon reduced those who had not drifted away to their homes to a condition of despair. Hidalgo, feeling that the cause was hopeless, fled northward with Allende, Aldama, and a few of the other leaders. They were captured and summarily executed. Their heads were set up on posts in the castle at Guanajuato as "a warning to all Mexicans who chose to rebel against the Spanish Government." These grisly trophies bleached in the sun and wind for eleven years before reverent hands took them down and buried them with the rest of the patriots' remains under the Altar de los Reyes in the Cathedral of Mexico City.

José Maria Morelos, a pupil and brother priest of Hidalgo, took up the leadership of the insurgent movement. He was of mixed Spanish and Indian blood, and possessed real military genius. He recognized that the insurgents were unfitted to meet the trained Spanish troops in the field, and carried on a guerrilla warfare in which he scored many successes, but was in the end captured and executed at Mexico City in 1815. Morelos is one of the heroes of Independent Mexico, and the city of Cuatla, where ferocious fighting took place during the terrible siege, as well as one of the states of the Mexican Federation, is now named after him. It is worthy of note that the " auto da fé " of Morelos was the last ever pronounced by the Inquisition (before which he was tried) in Mexico.

After the death of Morelos the insurrectionary movement almost ceased (though Vincente Guerrero was in the field in 1817). From 1816 until 1820 Mexico was so quiet that the Viceroy wrote the Spanish Government that there was no need for any more troops from Spain. But in the latter year a formidable movement began. General Augustin de Iturbide was appointed to command the Royalist forces; but very soon he and the rebel leader, Guerrero, came to an agreement, and decided to proclaim the independence of Mexico. This singular union

of forces, and, stranger still, the decision to break the Spanish yoke, had this time the blessing and approval of the Catholic bishops who, ten years before, had excommunicated poor Father Hidalgo and his followers. The cause of this *volte-face* is not far to seek. The Constitution of 1812, which Ferdinand VII had repudiated soon after the Restoration, was restored by a military rising in Spain in 1820. Under this Constitution the convents were dissolved, the Inquisition suppressed, the freedom of the Press proclaimed, and the tithes of the secular clergy appropriated for State purposes. The Mexican bishops and clergy saw that their privileges and property would be threatened if this Constitution were applied to Mexico, so they embraced the erstwhile " heretical " idea of independence, and eagerly supported the proposed " absolute separation from Spain and its Radicalism." So the bishops and clergy lent their support to the insurrectionary movement; Iturbide and Guerrero joined hands, and the famous " Plan of Iguala " was adopted. Under this scheme Mexico was to become a limited monarchy; the maintenance of the Roman Catholic religion, the privileges of the clergy, and the equality of Spaniards and native-born Mexicans were guaranteed. Iturbide sought to enlist the Viceroy, Apodaca, as a supporter of the " Plan of Iguala," but met with a refusal. Apodaca was superseded by General Juan O'Dónoju, who arrived at Vera Cruz with a commission as Captain-General in July 1821. At that time the whole of Mexico was in the hands of the insurgents, and O'Donoju had to beg permission from General de Santa Anna to land in the country. Recognizing that it was beyond his power to subdue the revolution, O'Donoju met Iturbide at Cordoba (August 24, 1821) and signed the " Treaty of Cordoba," by which Mexico was recognized as a sovereign and independent State. O'Donoju then proceeded to Mexico City, where he soon afterwards died. The Spanish Government repudiated the action of its Captain-General and

refused until 1836 to recognize the Mexican Government. Its troops occupied the island of St. Juan de Ulua off Vera Cruz till 1827.

The first Mexican Congress met in February 1822, the country having been governed from the preceding August by a provisional junta of five members, with Iturbide as president. When the Congress assembled it was divided into three parties, each with a different plân of government. One section was frankly Republican, despite the terms of the "Plan of Iguala," which provided for the establishment of a limited monarchy; a second section was in favour of proclaiming Iturbide as king; while the third held out in favour of inviting a Bourbon prince to be the sovereign of the new State. The continued refusal of Spain to recognize Mexico resulted in the latter faction breaking up and merging itself in the other two. The conflict which arose between the Republicans and the Monarchists was settled by a military pronounciamento in favour of Iturbide, who, as commander-in-chief, enjoyed great popularity with the Army. He had the scarcely less potent influence of the Church behind him. Congress, intimidated by this ominous combination, reluctantly gave way, and Iturbide, at a meeting, from which the Republicans were excluded by force, was elected Emperor of Mexico on May 18, 1822, and he was crowned in the Cathedral in Mexico City on July 21 of the same year.

CHAPTER II

INDEPENDENT MEXICO

The first Empire—Rise of the Republic—Maximilian's Empire—The Federal Republic—Recent Events

THE conflicts that arose between the Republicans and the Monarchists in connexion with the election of Iturbide—or Augustin I, to give him the style the "Emperor" assumed—were the beginning of a series of internal disorders that kept Mexico in unceasing turmoil till the General Porfirio Diaz was elected to his second term of office in 1884. During all that period the history of the country is a record of almost continuous warfare and revolution. Between 1821 and March 1913 Mexico has had two emperors and sixty-two presidents and provisional presidents at the head of the Government, exactly the same number as that of the governors and viceroys who ruled the country for Spain during three centuries. Sometimes the nominal ruler, whether emperor or president controlled the whole country; at other times his authority did not extend beyond the Federal District round the city of Mexico. Of this whole period of ninety-two years Porfirio Diaz was at the head of the State for no less than thirty-one years, and Benito Juarez ruled for fifteen years (1857–72), so that the average reign of the others was only a few months each. Some of them were in office for a period measured by days, and the term of Señor Lauriscan, the interim president between Francisco Madero and the present chief magistrate, General Huerta, was exactly twenty-six minutes—surely the

shortest period of power ever enjoyed by the head of any State.

The form of government varied almost as frequently as its nominal head. Augustin I sat on his uneasy throne for less than a year, when the Army deserted him, and he was forced to abdicate. A provisional Government and a "Council of Three" managed to tide over a year between them. Then came a "federal" republic under the Constitution of October 1824. It was followed in 1837 by a "centralized" republic under the Constitution of January 1 of that year. General Santa Anna established a dictatorship under the "Plan of Tacubaya" in October 1841. Thereafter control — if the authority exercised by the "transient and embarrassed" rulers can be so termed—see-sawed between dictators, presidents, provisional presidents, substitute presidents, acting presidents, and vice-presidents, down to the election of Benito Juarez in 1857, when an era of comparative stability was established. Nothing like the confusion and topsy-turvydom, punctuated by incessant intrigue, revolution, and massacre, that prevailed in Mexico was ever witnessed in any nation claiming to be a civilized community. One president, General Comonfort, actually joined a revolution against his own Government, which he succeeded in overthrowing. In form the government of the country was usually a republic, "centralized" or "federal," with the exception of the comedy of Augustin I, and the tragic interlude formed by the Empire of the ill-fated Maximilian, who after a brief reign of three years, supported by French bayonets, was executed by the Republicans on June 19, 1857. But whatever the nominal form, the actual government of Mexico, during the period of independence, as under the Spanish viceroys, has invariably been a despotism.

In studying the history of the long conflicts that have torn Mexico and checked her progress, it might appear to the

AN INTERIOR AT MITLA

superficial reader that the struggle was merely between rival generals and politicians. In reality, the contest was either between the privileged classes, that is the Church and the Army, and the masses of the people; or between the "Centralists" and the "Federalists." Indeed, the "Centralists" were identical with the Army, the Church, and the supporters of privilege, while the "Federalists" represented those who sought to extend the principles of liberty and self-government.

Until the adoption of the famous "Reform Laws" during the Presidency of Benito Juarez in 1859, the Army and the Church enjoyed very remarkable privileges and exemptions. One of the most oppressive and exasperating of these to the ordinary population was that under which any dispute in which an ecclesiastic was concerned must be decided by an ecclesiastical court. This practice led to gross and frequent miscarriages of justice, and the infliction of many wrongs on lay litigants. The contemplation of what went on was not soothed by the existence, side by side with it, of similar privileges in the possession of Army officers. But the people of Mexico had to endure this clerical and military predominance for forty years after the Spanish yoke had been broken.

The struggle between Centralists and Federalists is a phenomenon which is to be observed in the history of nearly all the Latin-American States, and would appear to have been an almost inevitable inheritance from the Spanish system. In Mexico the evil was increased by the ambitions of military leaders, who exploited the quarrel for the promotion of their own schemes and personal ends, and fought, sometimes on one side, sometimes on the other, according as they thought one or the other was most favourable to their plans. The wealth of the country was concentrated in a few hands; there was no middle class, and the great mass of the Indian and Mestizo population was steeped, as it still is, in extreme poverty. It was from this latter class that the fight-

ing men were, as a matter of course, recruited. The soldiers, who fared better during civil strife than in times of peace, when there was no booty to be obtained, were reluctant to return to civil life. Large numbers of them took to brigandage when actual hostilities were for a time suspended, and lived by plunder. Their activities rendered life and property insecure; even the owners of rich haciendas, who maintained armed forces for the protection of their estates, could not always secure themselves against the ravages of these bands, and the traveller and the poor peasants were entirely at their mercy.

Madame Calderon de la Barca, the wife of the first Spanish Minister to Mexico, who arrived in the country in 1839, gives a lively description of the dangers that beset the traveller between Vera Cruz and the capital, and how nothing was heard in the inns but "stories of robbers and robberies, and horrid murders all the while." During the latter part of the journey between Puebla and Mexico City these highwaymen were so numerous and daring that the Spanish Minister could only travel under the escort of a large body of soldiers. On the very day this part of the journey was made a regiment had a regular battle on the road with the bandits, during which numbers of men were killed and wounded.

The disorders began simultaneously with the securing of Independence. General Iturbide was no sooner seated on the throne of Mexico in July 1822 than a conflict broke out between him and the Congress which had elected him Emperor. Antano de Santa Anna, Captain-General of Vera Cruz, a familiar figure in the stormy period that ensued, proclaimed a Republic. The "Emperor" collected an army, and advanced towards the coast for the purpose of suppressing the new Republic. Santa Anna, nothing loath, marched to meet him, and the two forces met and fought a battle at Jalapa, where the Republicans were defeated. But the Emperor had alienated all

sympathy by his arrogance and extravagance. He had acquired a most extraordinary love for pageantry and display, and wasted immense sums in the maintenance of a pleasure-seeking court. Soon after the victory of Jalapa the army which had set him upon the throne deserted him, and in January 1823 his empire was confined to the city of Mexico. The whole country was in the throes of revolution, and on March 23 Augustus I was forced to abdicate. Congress sent him out of the country, and agreed to pay him a pension of £2500 a year so long as he remained abroad. He proceeded first to Italy, but soon afterwards went to Paris, and then to London. From this latter city he wrote to the Mexican Government, warning them that he had learned of a European plot for the restoration of Spanish rule in Mexico, and offered his services in defeating it.

Congress made a somewhat unkind acknowledgment of the ex-emperor's offer of assistance. It passed a decree (April 28, 1824) forbidding him to return to Mexico, and declaring that if he did so he would be regarded as a traitor, and be put to death if captured. Iturbide appears to have been unaware of this threat, because he followed his letter and landed in disguise at Soto la Marina. He was taken prisoner almost immediately, arraigned before the legislature of the State of Tamanlipas, was sentenced to death, and shot on July 24, just ten days after he had set foot ashore. Some of his grandchildren now live in Mexico City.

One of the first acts of Congress after the abdication of Iturbide was to repudiate the " Plan of Iguala," under which the empire had been established, and draw up a Constitution in many respects identical with that of the United States. It declared that the form of government should be " popular, representative, federal, and republican," and the country was henceforth to be known as the United States of Mexico. As, under the Constitution of the great neighbour to the north,

the constituent states were to be empowered with full rights of local self-government, each to have its own governor, legislature, and legal tribunals. The supreme federal power was vested in a General Congress to which the National Government established in Mexico City would be responsible; a supreme federal Court of Judicature was set up, and Felix Fernandez, the first President of the United States of Mexico, was elected. Everything was excellently arranged, on paper. But the Mexican has no capacity for representative constitutional government, and affairs proceeded no more smoothly than under the empire.

At its inception the nascent republic had the goodwill of the United States, though the third article of the Mexican Constitution was violently opposed to the ideas of liberty and equality which prevail in that country. This article contained the significant proviso, in which the still powerful influence of the clerical element was apparent, that "the religion of the Mexican nation is, and will perpetually be, the Roman Catholic Apostolic. The nation will protect it by wise and just laws, and prohibit the exercise of any other."

This proviso cannot have been altogether agreeable to the men then at the head of affairs in the United States, but the States took the sister republic under their wing. Whether the alarm given by Iturbide as to the existence of a scheme for the re-establishment of Spanish Authority on the North American continent had any real existence is doubtful. But there is no question that the belief in the possibility of some such move had an important influence in the United States, and was a large factor in bringing about the support and countenance given to the new Republic of Mexico. In his message to Congress on December 2, 1823, the President of the United States defined for the first time the policy which, under the name of the "Monroe Doctrine," has since been regarded as a warning to European Governments to keep their hands

off the American continent. This significant passage in President Monroe's Message was in the following words :—

> The American continents, by the free and independent condition which they have assumed and maintain, are henceforth not to be considered as subjects for future colonization by European powers. . . . We should consider any attempt on their part to extend their system to any portion of this hemisphere as dangerous to our peace and safety. With the existing colonies or dependencies of any European power we have not interfered and shall not interfere. But with the Governments who have declared their independence, and maintained it, and whose independence we have, on great consideration, and on just principles acknowledged, we could not view any interposition for the purpose of oppressing them, or controlling, in any other manner, their destiny, by any European power, in any other light than as a manifestation of an unfriendly disposition towards the United States. . . ."

Under the protection afforded by this important declaration of policy the young Republic set out upon its stormy career. Had its statesmen—if the term may be applied to politicians who, for the most part, set their personal interests and ambitions before the welfare of the State—possessed any real capacity for constitutional government the history of Mexico, and the progress and development of the country, potentially one of the richest in the world, would have been vastly different. For four years under the wise administration of President Fernandez there was some progress. Slavery was partially abolished, titles of nobility (Augustus I had established a full-blown aristocracy) were prohibited, and important laws dealing with the inheritance of property were passed. An attempt was also made to suppress brigandage and guarantee the security of life and property, and on the whole the prospects of the nation were hopeful.

But there were important elements in the country dissatisfied with the new order of things. The Church had no

love for a Government which was not entirely under her control, although she possessed a highly privileged position. Another fruitful source of instability in the young Republic was the rivalries between two differing branches of the Freemason Society. In the revolution against Iturbide the Craft had played a very important part and contributed largely to its success. Then came a serious split between its members. One section, working the Scottish ritual, and known as "Escoceses," was Monarchical, Centralist, and reactionary. The other, which adopted the American ritual, was termed "Yorkinos." It supported the Federal system, and its adherents were Liberal in their ideas. Joel Poincett, the United States Minister, possessed great influence with the Yorkinos, who took their cue from America.[1]

So violent became the difference between the two camps that a revolt broke out against the Republic under the leadership of Nicolas Bravo, Grand Master of the "Escoceses." It was suppressed, but the discontent only smouldered. Meanwhile dissensions appeared among the "Yorkinos" between the followers of the President and the party of the War Minister, Gomez Pedraza. The Catholic party thought the time opportune for attempting the re-establishment of the ancient regime, and an insurrection, with its centre at Puebla (the "Rome of Mexico"), was organized, as alleged, by two Franciscan monks. Its aim was to restore the lost supremacy of Spain and the Church. The Escoceses lent the movement some support, and there was presented the singular phenomenon of Freemasons and Roman Catholics joining hands in supporting a common political cause.

Despite the combination the Federalists were successful, but the period of peace, progress, and reform which marked

[1] It is in some degree noteworthy that quite recently a somewhat similar split has occurred in Mexican Freemasonry, by which the old rupture was renewed, though the cause on the latest occasion had no concern with politics, but was due to a dispute over the appointment of officers.

the opening years of the Mexican republic was at an end, and more than a generation of constant revolts and warfare ensued. A succession of turbulent and self-seeking figures held the stage, conspicuous amongst whom are those of Santa Anna and Antonio Bustamente. There were some patriotic and liberal-minded men like Guerrero and Gomez Farias, but in a land where the great mass of the population was practically without any sense of country they could accomplish little, and the self-seekers exploited the ignorant and credulous Indians for the purposes of rebellion and personal ambition as ruthlessly as the Spaniards exploited them for profit. Guerrero, a just and fair-minded man, anxious to promote the welfare of Mexico and the liberties of her people, was deposed from the Presidency and executed, and Farias was exiled.

Spain once again, despite the Monroe Doctrine, sent an expedition in 1829 to reconquer Mexico, but it was defeated at Tampico by Santa Anna, who later on assumed the Presidency. He arrogated dictatorial powers to himself, dissolved Congress and the State legislatures, and appointed his own adherents as governors of the States and mayors of the towns.

The reputation of Mexico was never at so low an ebb as during this period (1834). Its political instability became a byword, and its people were regarded as restless, revolutionary, and savage. By the "Plan of Toluca" the Federal republic was abolished, and a highly centralized system set up, by which the States were converted into departments under military governors, and the country sank into a condition which a cynical writer once applied to the South American republics, of "Anarchy tempered by revolution." The supreme power was held in turn by one General after another as each succeeded in securing control of the Army. There was no regard for either life or property; brigandage was rampant everywhere, and murder and every form of crime was perpetrated with impunity. The Republic became, in fact, a military

oligarchy, and civil rights disappeared. Meanwhile France had been unsuccessfully claiming compensation for the losses sustained by her subjects during the revolution of 1828, when many shops and other business premises were looted in Mexico City. No satisfaction could be obtained, and in 1838 began what is known as "The Pastry War," because one of the principal claims put forward by the French was on behalf of a confectioner of that nation whose property had been seized by the rebels during the pillage of foreign shops. A French fleet appeared off Vera Cruz, bombarded the fortress of San Juan de Ulua, and occupied the city. Upon this the Mexican Government gave way, and settled the claims. Indeed, it could do nothing else, for in addition to the foreign enemy at its gates it was threatened by a Federal rising and the secession of several states. The settlement of the French claims removed the danger of further foreign invasion, but the internal condition continued in the same hopeless state as before.

This condition of things continued till 1847, when war broke out between Mexico and the United States over the question of Texas. The beginnings of this quarrel date back to 1821, when a man named Moses Austin was granted certain rights in Texas on the ground that, as a Catholic, he was flying from religious persecution in the United States. Austin himself died soon afterwards, but his schemes were carried forward by his son Stephen, and numbers of Americans settled in Mexican Territory.

In 1827, and again in 1829, unsuccessful negotiations for the purchase of Texas had been initiated by the American Government, mainly in deference to a large body of opinion in the Southern States, which held that the territory rightly belonged to the United States. Under the tyrannical methods of Santa Anna the American settlers in Texas were goaded into rebellion against the Mexican Government, and the Texans,

under the leadership of General Sam Houston, a Virginian by birth, determined to establish an independent Republic. The insurgents were defeated by Santa Anna at Alamo and Goliad, and all the prisoners taken were slaughtered in cold blood, a practice not yet entirely abandoned by Mexican soldiers. But in April 23 General Houston, with 783 men, encountered Santa Anna at the Rio San Jacinto, and in an action that lasted barely half an hour defeated and captured the whole Mexican force. The President narrowly escaped execution at the hands of the infuriated Texans, and to save his life was glad to acknowledge the independence of Texas. The United States, England, France, and Belgium at once recognized the freshly created State, of which General Houston was elected president. It maintained a separate existence until 1844, when it declared for annexation to the United States, and was admitted as a State of the Union.

Santa Anna, as soon as he got back to Mexico after his defeat at the San Jacinto River, had promptly repudiated the treaties and agreements made with the Texans, and Mexico, in consequence, had maintained her claim to Texas. When the short-lived Republic was annexed to the United States Mexico burst into fury at what the Mexican Minister in Washington described as "an act of aggression the most unjust which can be found in the annals of modern history." The reason for the rage of the Mexicans was, of course, to be found in their realization of the fact that the annexation of Texas to the United States destroyed for ever all hope of recovering the lost territory.

Diplomatic relations between the two Republics were broken off, and General Zachary Taylor was ordered to march to the Rio Grande with the American army. The then President of Mexico, General Herrera, countered this action by declaring the Annexation of Texas a breach of international faith, and issuing a proclamation calling upon all Mexicans to rally to

the defence of the country. The Mexicans were everywhere defeated, but refused to propose terms of peace. The United States Congress then voted ten million dollars for the war; 50,000 troops were at once raised, and General Stephen Kearney was directed to occupy California, while General Scott was dispatched to seize the port of Vera Cruz, and march on Mexico City. Meanwhile the victorious army of the Rio Grande advanced southwards to Chihuahua, which was occupied by the American forces after a successful battle at Sacramento. A revolt against Mexico broke out in California, and that territory was formally annexed by Commodore Stockton.

The hostilities in other parts of the country were equally unfavourable to the Mexicans. Vera Cruz surrendered to General Scott on March 29, after a twelve days' bombardment, and he captured 5000 prisoners with 300 guns. With 12,000 troops Scott began his march to the Mexican capital. At Cerro Gordo he was opposed by Santa Anna with 15,000 men, but the Americans swept all before them, scattering the Mexican army to the winds, capturing over 3000 prisoners and 43 cannon. Puebla was occupied on May 15, and General Scott sat down there to await reinforcements, as his troops had been reduced by sickness and casualties to less than 5000 men. These arrived after three months' delay, and on August 7 General Scott resumed his advance.

The sick and wounded men were left behind in Puebla. No sooner had the American army crossed the mountains by the Rio Frio Pass than 2500 Mexicans, under Santa Anna, swooped down to attack Puebla. There were 1800 sick and disabled soldiers cooped up in the Plaza de la Constitucion, with only 500 men to protect them. Colonel Childs, who was in command, fortified the plaza with barricades of stone and bales of cotton, and for thirty weary days, in the midst of a hostile city of 80,000 inhabitants, maintained a gallant fight. The Americans knew that with the bloodthirsty Santa

CHAPULTEPEC CASTLE AND PARK, MEXICO CITY

Anna in command of the enemy capture meant massacre. Every man fought desperately; even the sick and such of the wounded as were able to stand took their turn in defending the breastworks. The inhabitants of Puebla took part in the attack on the hapless American troops, firing from the roofs and windows of the houses, while Santa Anna's men bombarded the plaza with artillery, and made fierce attacks with the bayonet through the narrow streets. All their attempts to capture the American position were defeated, and Colonel Childs held out, until the approach of General Lane with reinforcements from Vera Cruz compelled Santa Anna and his horde to fly to the mountains.

In the meantime, General Scott had continued his march to the capital, and after several short engagements, including the storming of the Castle of Chapultepec, the American flag was hoisted on the National Palace on September 14, 1847. By the ensuing treaty of peace Mexico ceded 700,000 square miles of territory to the United States, including New Mexico and California. With the same generosity which marked her conduct after the successful war against Spain in 1898 the United States agreed to pay Mexico fifteen million dollars for the ceded territory, and to accept three and a half million dollars in satisfaction of the claims of American citizens against Mexico.

For a year or so after the withdrawal of the United States troops Mexico remained quiet, and the President, General Herrera, made some little progress in reorganizing the shattered resources of the country. When he resigned, General Mariano Arista was constitutionally elected President, the first so chosen in the history of the Republic. Despite this, the internal troubles were soon renewed. The conservative elements became alarmed at the Liberal tendencies displayed by the new President, and in July 1852 a new revolution, incubated very largely under clerical influence, broke out in Guadalajara, and spread rapidly. Arista, disheartened by the

opposition to his schemes, which were promoted only for the country's good, resigned the Presidency, and went to Portugal, where he died a year later in poverty and obscurity.

Then followed a period of absolute despotism. Santa Anna was recalled on February 4, 1853, and was made Dictator. The ecclesiastical party again secured a large share of power, and under their influence the Jesuits were recalled by a decree published in May 1853. To provide himself with funds, the Dictator sold what is now the State of Arizona to the United States for ten million dollars, but this sum was soon dissipated. He re-established the "Order of Guadalupe," originally created by Iturbide, appointed himself Grand Master, and insisted on being addressed as "Serene Highness." In December he proclaimed himself "Perpetual Dictator," threw into prison or drove out of the country every one who ventured to oppose his decrees, and generally acted as an absolute despot. The only act of Santa Anna's Government during this period which contained any fragment of political wisdom was the establishment of a "Department of Fomento" for the encouragement of public works, education, and intellectual and economic development. This ministry, which was due to the advice of Lucas Alaman, a strong reactionary but a man of ability, is still a very important factor in Mexican Government. With this single exception, Santa Anna's rule was that of an insane egotist, which even Mexico could not long endure.

Discontent broke out into open rebellion, and the "Perpetual Dictator" fled from Mexico City on August 9, 1855. A period of great disorder ensued, and the election and overthrow of two Presidents occurred between August and December, when Ignacio Comonfort, who, with General Juan Alvarez, had led the opposition to Santa Anna, was chosen as head of the troubled State.

At this time two figures who were destined to exercise a

vast influence for good on the fortunes of the country began to emerge into prominence. These were Benito Juarez and Porfirio Diaz, the former a pure Indian, and the latter with a large infusion of Indian blood in his veins. Juarez, who was the son of a peasant in the State of Oaxaca, inaugurated and carried through by far the most important reforms ever instituted in the history of Mexico, and Diaz for more than a generation, by his wise, firm, and enlightened rule, ensured an era of peace and progress. The Republic as it exists to-day is the result of their efforts, and their names shall long endure as those of two of the world's really great men. Both had a share in the deposition of the Dictator. Juarez was already a man of note sufficient to excite the enmity of the reactionaries, and had been thrown into prison with the other Liberal leaders. Diaz, then a young soldier, is said to have made his way to Juarez in prison, and arranged with him the preliminaries of the revolt. General Carrera was appointed Provisional-President to succeed Santa Anna. His policy was too Centralist to suit the Liberal views of the men who now controlled affairs. After a reign of twenty-eight days he was replaced by General Alvarez, who occupied the presidential for only a couple of months. Comonfort was then elected, and appointed Juarez Minister of Finance.

One of the first acts of the new Minister was to secure the enactment of a law (Ley Juarez, November 23, 1855) bringing the army and the clergy within the jurisdiction of the ordinary courts of justice. Up to this time, cases in which these two classes were concerned could only be tried by ecclesiastical or military tribunals. The evils which resulted from this system can be imagined, when it is stated that more than half the crime in Mexico was committed by men amenable only to the military courts, which were notoriously lax and biased in the administration of justice. The situation was even worse with regard to the ecclesiastics. At this date

one-third of the entire landed property in the country was owned by clerics or religious orders, and the " Benefit of the Clergy," which has not unjustly been termed the " Curse of Mexico," was carried so far as to include the housekeepers and household servants of the priests, who often evaded the payment of just debts because the shopkeepers were unable to enforce their claims in the civil courts.

Needless to say, the ecclesiastics were roused to violent opposition by what they regarded as a flagrant infringement of the rights of the Church, and the newly appointed Bishop of Michoacan denounced the reforms as heretical, and used all the influence he could bring to bear against the Government. Despite every effort, however, a large portion of the army remained faithful, and with it President Comonfort enforced the new laws with vigour, and suppressed the incipient revolution fomented by the Clerical Party. A still more important step was taken. With the support of the President, Juarez and Ocampo took up the project of reform inaugurated by Michal Lerdo de Tejada, and passed it into law. This famous law, known as " El Decreto de Desamortización " (the Decree of Mortmain), directed the sale of Church lands and property at their assessed value, the proceeds to be paid to the ecclesiastical authorities. The vast areas of land in the hands of the clerics were thus freed from Mortmain, and became available as part of the ordinary mobile wealth of the country.[1] By the end of 1856 no less than twenty million pesos worth of property had passed into private hands.

The clergy were rendered furious. The Bishop of Puebla preached against the new law, and the Archbishop of Mexico demanded that the matter should be submitted to the arbitration of the Pope, a demand indignantly rejected by the Mexican Government. Henceforth it was war to the death between the Clericals and the Liberals. Incited by the fulminations

[1] See Terry's *Sketch of Mexican History.*

of the Bishop, large numbers of Catholics rose in revolt, and an army of 15,000 was organized at Puebla, the most religious town in Mexico. The President, although he greatly disliked the conflict between Church and State, was compelled by Juarez and the other Liberal Ministers to act with energy, and the revolt was promptly suppressed. He then issued a decree sequestrating all Church property in the Diocese of Puebla, and allocated the proceeds of the sale to the payment of the expenses incurred by the Government in combating the revolution. The Clericals were daunted by these measures, but they did not give up the struggle. In September a fresh conspiracy against the Government was discovered. Its centre was the Franciscan monastery in the heart of Mexico City, where its gardens and grounds covered the area now occupied by the principal business streets of the capital. Comonfort at once suppressed the monastery, and laid out a wide street, the Avenida de Independencia, through the convent garden. The monastery church, which is still in existence, now fronts immediately upon the Calle de San Juan de Letran, hemmed in by commercial buildings. It was for centuries the centre of religious life in the New World, and is still the fashionable church of Mexico City, though its once extensive grounds are covered by busy thoroughfares.

All the powers of the Clericals were now exerted to the utmost against the Liberal Government. Decrees of excommunication were pronounced against the Ministers, and Pius IX, as might be expected from so reactionary a Pontiff, pronounced the Government of Mexico to be "Apocrypha," and placed it under the ban of the Church. At the same time the Mexican bishops denounced all who would purchase Church lands under the new laws, and declared that the curse of God would rest upon them for engaging in such traffic. "By these threats the public was restrained from purchasing at the Government sales, and few bidders were found with courage

to risk the 'curse.' Those who bought in the property at low figures made fortunes, at small outlay, albeit they gained the bitter enmity of the Church." [1]

Despite the difficulties thus placed in its way the Ministry proceeded upon its path of reform, and a new Constitution modelled upon that of the United States, and almost identical with that now in force, was adopted. The President, who seems, after all, to have been somewhat susceptible to ecclesiastical censure, began to waver, and a few days after signing the new Constitution he joined in a revolt against his own Government, and threw Juarez, who was the soul of the reform movement, into prison. The Clericals had now the upper hand. A new Constitution was adopted under the "Plan of Tacubaya" (a suburb of Mexico City), and Comonfort appointed as Dictator. But he soon repented of his action, released Juarez, and endeavoured, though without success, to undo the result of his weakness. Recognizing his failure, Comonfort fled on February 5, 1858, and Feliz Zuloaga, a thorough reactionary, was proclaimed President by the Clericals. He was very soon replaced by Pezula, who in turn gave way to General Miramar, an able but unscrupulous soldier.

Meanwhile, Benito Juarez, who as Chief Justice of the Supreme Court had claimed to succeed Comonfort as President, had set up a Liberal Administration, first at Querétaro and afterwards at Guadalajara, and the whole country was soon in its normal state of civil war. Juarez retired to the Pacific coast, from whence he went to the United States. His followers were twice defeated outside Mexico City. On the second occasion, April 11, 1859, during the Presidency of Miramar, all the officers who surrendered were shot, it is said, by the President's orders, and with them six doctors (including Dr. Duval, a British subject) who had gone out to the scene of the battle at Tacubaya to succour the wounded.

[1] Noll, *Empire to Republic.*

This atrocious massacre roused intense indignation in the United States and Europe. Juarez, who had returned to Vera Cruz, was recognized as President of Mexico by the United States, whose Government permitted him to obtain supplies of arms and ammunition and to enlist volunteers in that country. Juarez was thus enabled to possess himself of the principal ports, and the Clerical reactionaries in Mexico City were reduced to great financial straits.

The struggle between Benito Juarez, who had established his Government at Vera Cruz, and the Clericals is known as the "War of Reform." The President, with a doggedness typical of his Indian blood, continued his attacks upon the Church. He passed laws suppressing the religious orders, nationalizing all Church property, establishing civil marriage, and transferring the cemeteries to civil control. In a word, he completely disestablished the Church. The struggle went on for a number of years, and fierce battles, marked by the ferocious cruelty that appears to be inseparable from all wars in which religion plays a part, were fought at Querétaro, San Luis Potosi, Puebla, Pachuca, and other places. To such a deplorable condition of anarchy did Mexico become reduced, and so hopeless appeared any chance of order being restored, that in 1859 President Buchanan, in a message to Congress, recommended that the United States should intervene. Congress, however, with the Slavery Question approaching a crisis, declined to sanction this step.[1]

So the conflict went on to its end. Juarez, whose possession of the ports enabled him to keep his troops supplied from

[1] A joint intervention by Great Britain, France, Spain, and Prussia was also mooted, but no active steps were taken, though Great Britain went the length of breaking off diplomatic relations, mainly because of the action of the Clericals in seizing 630,000 dollars in specie, that had been deposited under seal at the British Legation in Mexico City for the British bondholders.

abroad, gradually won his way to victory, and on January 11, 1861, he entered Mexico City as a conqueror.

But fresh troubles were in store for Mexico. The President, in view of the almost hopeless financial condition of the country, decreed a suspension of interest on foreign debt for two years, in order that the work of restoration might be set going and Mexico be placed in a position to meet her obligations. He was being held responsible for the excesses of the Clericals as well as those committed by his own troops, and both had been guilty of many outrages on the life, liberty, and property of foreign residents. Miramar had violated the British Legation, and Juarez himself had expelled the Spanish Minister, the Papal Degate, and the ministers of Guatemala and Ecuador because these functionaries had openly sided with the Clerical reactionaries. A Swiss banker in Mexico, named Jecker, had lent Miramar $750,000, and had been given in return bonds of the face value of $15,000,000, bearing interest at 6 per cent. Certain correspondence, since published in De la Gorce's *History of the Second Empire*, discloses the fact that the proceedings in connexion with this loan were tainted with grave irregularities. It is certain that, among others, the French representative in Mexico was won over by financial considerations to support Jecker's claim, and a prominent statesman at home in France promised the banker his assistance in the matter in return for 30 per cent. of the profits.

Other influences in the French capital hostile to the Juarez Government were also at work. The ex-Archbishop of Mexico (La Bastida), ex-President Miramar, and others had fled to Paris after the defeat of the Clericals, and were exerting themselves to hamper and harass their successful opponents in Mexico. These worked mainly through the Empress Eugénie, herself a Spaniard, whose ill-advised interferences in politics brought woe to both Mexico and France. The Empress exerted

her influence with the Emperor in questions relating to the Republic, and Napoleon III, who had long indulged in dreams with regard to Central America, was not unwilling to intervene. He was anxious to placate Austria, whose friendship had been alienated by the campaign of 1859, and he conceived the plan of establishing an empire in Mexico, and offering its throne to a prince of the House of Hapsburg. Jecker's claims against the Republic offered a plausible excuse for intervention. But the banker was a Swiss subject, and France had no *locus standi*. This difficulty was got over by the issue of an Imperial decree making Jecker a French citizen, and Napoleon III then took up his claim.

It is not necessary for the purposes of this brief sketch of Mexican history to trace the negotiations carried on by the French Government in reference to this matter. It is sufficient to state that an agreement was made between France, Great Britain, and Spain for a joint intervention in Mexican affairs, a proceeding rendered plausible by Juarez's suspension of the interest on the foreign debt. The only opposition to the plan that might be expected would come from the attitude of the United States Government, which had nearly forty years before adopted the policy of the Monroe Doctrine. The outbreak of civil war between the Northern and Southern States enabled the European Powers to undertake their schemes without apprehension of immediate complications with the American Republic.

Dr. Draper in his *History of the American Civil War* (New York, 1870) says :—

> "The project was characterized by all the selfishness which is usually the underlying principle of all nations, and the aims of the three contracting parties eventually became apparent. Spain expected that a Bourbon prince would be placed on the Mexican throne, and that she would thereby recover her ancient prestige and bind more securely to her the valuable island of Cuba. Perhaps she might even recover Mexico itself,

and again bind that freedom-loving country in the chains of ignorance and tyranny which were its lot during Spanish dominion and misrule. England, remembering the annexation of Texas, saw that it was desirable to limit the ever-threatening progress of the Republic (the United States) westwardly; to prevent the encircling of the West Indian seas by a power which, possibly becoming hostile, might disturb the rich islands she held; nor was she insensible to the importance of partitioning what seemed to be the cotton-field of the world."

Napoleon III concealed from Spain his real purpose of compensating Austria for her defeats in Italy. His object, sound and far-seeing enough from the point of view of a European ruler, is set out in a letter, quoted by Dr. Draper, which the Emperor wrote to General Forey on July 3, 1862:—

"There will not be wanting," wrote Napoleon, "people who will ask you why we expend men and money to found a regular government in Mexico. In the present state of civilization of the world, the prosperity of America is not a matter of indifference to Europe, for it is the country which feeds our manufactures and gives an impulse to our commerce. We have an interest in the Republic of the United States being powerful and prosperous, but not that she should take possession of the whole Gulf of Mexico, thence commanding the Antilles as well as South America, and be the only dispenser of the products of the New World. We now see by sad experience how precarious is the lot of a branch of manufactures which is compelled to procure its raw material in a single market, all the vicissitudes of which it has to bear.[1] If, on the contrary, Mexico maintains her independence and the integrity of her territory, if a stable government be there established with the assistance of France, we shall have restored to the Latin race on the other side of the Atlantic all its strength and prestige; we shall have guaranteed security to our West Indian colonies and to those of Spain; we shall have established a friendly influence in the centre of America, and that influence, by creating

[1] This is a reference to the cotton famine, the effects of which were then making themselves severely felt in England.

numerous markets for our commerce, will procure us the raw materials indispensable for our manufactures. Mexico, thus regenerated, will always be well disposed to us, not only out of gratitude, but because her interests will be in accord with ours, and because she will find support in her friendly relations with European Powers. At present, therefore, our military honour engaged, the necessities of our policy, the interests of our industry and commerce, all conspire to make it our duty to march on Mexico, boldly to plant our flag there, and to establish either a monarchy, if not incompatible with the national feeling, or at least a government which may promise some stability."

It must be remembered that in connexion with the secession of the Southern States influential Confederate leaders had proposed an arrangement with Mexican politicians for a political union between Mexico and the seceding States, and grandiose schemes were put forward for the establishment of a great empire, encircling the West Indian seas, and, eventually, absorbing the Caribbean archipelago.[1] France and England were not unwilling to see the United States divided, but neither had any desire to see the creation of the new and powerful State which would result from a union of the Confederacy with the Republic of Mexico; hence the readiness with which an agreement was made to forestall the possibility of this consummation by a European intervention in American affairs.

The ostensible reason put forward for intervention was the decree of the Mexican Government suspending payment on the foreign debt. When it was seen that the Confederate States would, at the least, be able to offer a prolonged resistance to the Washington Government, the three European Powers took action. On December 14, 1861, a Spanish force was landed at Vera Cruz, and occupied the city. A French fleet, with transports conveying a large military force, arrived

[1] Draper's *History of the American Civil War.*

a few days later, and Great Britain sent some ships which landed 700 marines, but these were soon re-embarked. Before long differences arose between the intervening Powers and Great Britain, and Spain withdrew from the expedition, the former alleging as her reason that Mexicans known to hold monarchical opinions were accompanying the French troops. Spain had by this time learned that the real object of Napoleon III was to place the Grand Duke Maximilian of Austria on the throne of Mexico. Disappointed in the dreams of re-establishing Spanish supremacy through a Bourbon ruler, Spain also recalled her ships and troops.

France, however, had no intention of relinquishing her plans, and large reinforcements were hurried out from Europe. Before the Triple Alliance broke up, a Conference had been opened between the representatives of the three Powers and the Juarez Government at which it was arranged, in view of the unhealthiness of Vera Cruz, that the Allies should be allowed to occupy Cordoba, Orizaba, and Tehuacan, but that, in the event of a final settlement not being arrived at, the foreign troops should retire to the coast before beginning hostilities.

When Spain and England withdrew, the French refused to carry out this part of the agreement. Instead they sent a force of 6000 men to attack the city of Puebla. They were defeated by 4000 Mexicans under the command of General Zaragoza and General Porfirio Diaz, who had gained distinction in the struggle against the Clericals. The battle took place on May 5, a date ever memorable since in the history of Mexico. There is scarcely a town in the Republic that has not a "Calle de Cinco de Mayo," named in commemoration of the victory over the French. General Forey with a large army was at once sent from France to support Marshal Bazaine, who was then in command of the French troops. These reinforcements reached Orizaba in September, but no forward movement was

POPOCATAPETL FROM PUEBLA FORT

made till February, when Puebla was captured on the 17th of that month. Mexico City was entered by the French troops on June 7. They received an enthusiastic welcome from the Clericals, who thought they now saw at hand the permanent re-establishment of their supremacy and the restoration of the confiscated Church property.

As soon as they were in possession of the capital, the French threw aside all disguise and proclaimed their intention of setting up an empire in Mexico and placing the Archduke Maximilian, brother of the Emperor Francis Joseph, on the throne. Archbishop La Bastida, who had returned in the train of the French commander, was named along with the reactionaries Almonte and Salas as Regents to administer the country pending the arrival of the new Emperor. The Archbishop pressed the claims of the Church too eagerly and prematurely to suit the French, and after bitter quarrels he was removed from his position as Regent by General Forey. In return he made the best reply in his power, and promptly excommunicated the whole French Army.[1] A conference of thirty-five Mexican notables, all staunch adherents of the Clerical Party, was summoned by General Forey, and this in turn called together a larger junta, all of the same political leanings, which formally declared that Mexico accepted a hereditary monarchy, of which a Catholic prince would be the head, and formally offered the Crown to Maximilian. The members of both these conferences were nominated, directly or indirectly, by Dubois de Saligny, the French Minister in Mexico, and he took good care that no man of Liberal tendencies should be included.

All this was done to give an appearance of regularity and legality to the compact already arranged between France

[1] Mexican prelates are exceedingly fond of excommunications, and there are very few who have had anything to do with Mexico, politically, who have not had this decree pronounced against them at some time or other.

and Austria, a compact to which Pope Pius IX had given his sanction on the assurance that one of the first acts of the new Government would be to restore to the Church lands and property estimated at two hundred million dollars. Maximilian at once accepted the proffered Crown, and gave a public undertaking to carry out the restoration of Church property required by the Pope. The agreement was signed by Maximilian at his Villa of Miramar, near Trieste, in April 1864, and he and his consort, Charlotte, daughter of Leopold I of Belgium, at once left for Mexico. They travelled via Rome, where they were received by the Pope, who bestowed his blessing upon the Royal pair, and gave them Holy Communion with his own hands.

Part of the agreement with Maximilian included the advance of a large sum for the payment of his private debts in Europe and the guaranteeing of an annual civil list of $1,700,000 for the use of himself and his wife. All this, together with other large sums expended on the Emperor's journey from Europe and official receptions at Vera Cruz and Mexico City, were saddled on Mexico, which at the time was too poor to even pay the interest on her foreign debt.

Maximilian entered Mexico City on June 12, 1864, supported by French bayonets. He at once introduced all the rigid etiquette of the Vienna Court, then, as it still is, the most absurdly formal and antiquated in Europe. Extravagant expenditure marked the new Court from the beginning. Huge sums being lavished on balls, entertainments, and brilliant state ceremonial. Meanwhile, Mexico was in the throes of civil war. Juarez in the north and Diaz in the south maintained a gallant but seemingly hopeless struggle against the French armies. Diaz was defeated and captured at Oaxaca, but refused his parole, and was imprisoned for several months. He finally managed to make his escape, and at once resumed guerrilla warfare against the invaders. Juarez and his generals

were similarly occupied in the Northern States, but no progress was made, and in 1865 the prospect for the Liberal cause in Mexico seemed hopeless. But the tide was near its turn. Maximilian, in his anxiety to restore peace to his distracted empire, was desirous of placating the Liberals. His tentative efforts in this direction had angered and discontented the Clericals, whose annoyance was increased by the refusal of the Emperor at once to undertake the repeal of the Reform Laws and the restoration of the Church property. Maximilian became unpopular, even with the Clericals, and the presence of the Belgian and Austrian regiments, which were to form the nucleus of the new Mexican army, was bitterly resented by the mass of the population.

The situation had become very disquieting, but a still more serious danger threatened the stability of the empire, dependent entirely as it was upon the French Army. In 1865 the Southern Confederacy collapsed in the United States, and the Washington Government was once more in a position to devote attention to what was going on south of the Rio Grande. At the close of the Civil War, the United States had at its disposal an army of veteran soldiers superior both in numbers and training to any which the most powerful European nation could place in the field. The Monroe Doctrine had become an article of faith with the American people, and public opinion was strongly opposed to what had been done in Mexico, while the United States was rendered impotent in foreign affairs by the rebellion of the Southern States. That source of weakness was now removed, and Mr. Seward, the Secretary of State, dispatched a firmly worded demand to the French Government for the withdrawal of its troops from America. Napoleon III tried to temporize in the matter, but Seward was insistent, and his demands were backed by the movement of a large body of United States troops, under the command of General Philip Sheridan, towards the Mexican

frontier. The Emperor quickly saw that the Washington Government was in deadly earnest, and an undertaking was given for the recall of the French troops from Mexico.

When news of this reached Maximilian, he was dismayed, and exclaimed, "I am tricked!" The Empress Charlotte, a clever and ambitious woman, saw even more clearly than her husband what would be the result of the withdrawal of the French armies from Mexico, and she determined to proceed herself to Europe, and urge upon Napoleon the claims of the empire he had set up beyond the Atlantic. Napoleon refused to see her, but the half-frantic woman forced herself into his presence, and upbraided him for what she termed his treachery. The Emperor coldly refused further aid to Mexico, either military or financial, and a scene of violent recrimination occurred between these two exalted personages. Napoleon has been blamed for his action at this stage, but he had really no choice. He was perfectly aware that any further interference in Mexican affairs would bring a declaration of war from the United States, and he had no wish to become involved in a campaign which could only result in disaster and defeat for the French arms. He had already decided to send Castelnau to supersede Bazaine in Mexico, to arrange for the withdrawal of the French troops in one body, and to re-establish the Republic under Ortega. The latter had quarrelled with Juarez, and would therefore be more or less acceptable to the Clerical Party.

In despair, on learning what the French Emperor had decided, the unhappy Empress hurried to Rome to seek the aid of the Pope. Pius IX was no more anxious to receive Charlotte than Napoleon had been, but she was by this time on the verge of insanity from disappointed ambition, and was not to be denied. When she entered the presence of the Pope, she was seized by a paroxysm of nervous terror, and exclaimed that she had been poisoned by order of Napoleon III. She

refused to leave the Vatican, and had to be removed by force from the papal apartments. Later on she became so violent that she had to be placed in a strait-jacket, and eventually she died in a madhouse.

Meanwhile, the Mexican portion of the tragedy was drawing to its climax on the other side of the Atlantic. Maximilian, recognizing that France must yield to the demands of the United States, and recall her troops from Mexico, drew closer to the Clericals, though he was desirous that a Congress, representing all parties, should be assembled to decide the future of the empire. Nothing came of this suggestion. As the French evacuated the positions in which they had established garrisons, the Republicans occupied them, and the territory under the control of Juarez extended rapidly. On February 5, 1867, the French Army marched out of Mexico City on its way to the coast, and abandoned Maximilian to his fate. Eight days later he left the capital, and proceeded to Querétaro, where the Imperial Army was being besieged by the Republican forces. Maximilian was undoubtedly misled by his advisers as to the real position of his troops, and found himself, to his amazement, in a beleaguered city from which there was no escape. It was not the first occasion on which the Clericals had deceived him. A little earlier they had informed him that Benito Juarez had fled from Mexico, and persuaded him to issue a decree declaring the Republicans to be guerrillas, and that any of them who might be captured would be tried by court martial and shot. This ill-advised decree, which owed its origin to the implacable hatred of the Clericals for the Liberals, sealed Maximilian's own fate when he fell into the hands of the Republicans.

Querétaro was defended by the Emperor and his generals, Miramar and Mejia, until May 15. A last effort to break out of the besieged city had been planned for that date. The plan was betrayed to the enemy by Colonel Lopez, and when

the attempt was made it was easily frustrated. Maximilian was taken prisoner along with Miramar and Mejia. The three were tried by court martial, and condemned to death. Efforts were made by the President of the United States and by the sovereigns of the United Kingdom, France, and Austria to save the Emperor's life; but Juarez, with dogged Indian stolidity, refused to grant a reprieve. The unhappy Maximilian, who had come to Mexico with dreams of renewing the glories of the ancient Aztec Empire, was shot on the Hill of Bells (El Cerro de las Campañas), outside the city of Querétaro, at sunrise on the morning of June 14, 1867. The ashes of the dead Emperor were afterwards removed to his native land, and they now rest in the Imperial vault of the Hapsburgs in the Capuchin church in Vienna.

The Republic was restored immediately on the death of Maximilian, and Benito Juarez re-entered Mexico City on June 21, five years after he had been driven out of it by the Clerical Revolution. Opposition to the Republic lasted for a little while in Southern Mexico, but it was speedily subdued by Porfirio Diaz, who captured Puebla, and the last Clerical stronghold, at Inayarita, was taken on July 20, 1867. In October Juarez was re-elected President, but insurrections again broke out, discontented Republicans with Porfirio Diaz at their head contesting the authority of the Central Government. These revolts went on sporadically until the death of Juarez in 1872. Sebastian Lerdo de Tejada succeeded Juarez, and remained in office until November 1876, when his Government was overthrown by Diaz, who was proclaimed President in May 1877.

An important event of Lerdo's Presidency was the opening of the railway between Vera Cruz and Mexico City. This great engineering undertaking was carried through by British enterprise and was formally inaugurated on January 1, 1873.

Diaz's first presidency was disturbed by several unsuccess-

ful attempts at revolution and by boundary disputes with the United States and Guatemala, but the period, on the whole, was marked by considerable progress in the improvement of internal conditions and the development of the resources of the country. In obedience to the law passed forbidding the immediate re-election of a President to a new term of office, Diaz retired in 1880, and was succeeded by Gonzalez. Diplomatic relations with various foreign countries had been resumed, and Mexico was gradually settling down to orderly conditions, though brigands still infested many districts. In 1884 General Diaz was again re-elected President, and remained continuously in office until 1910, when he resigned in consequence of the success of a revolution of which Francisco I. Madero was the figurehead.

The long rule of Diaz covers the greatest period in Mexican history. It was marked by enormous advances in material prosperity and development; brigandage was everywhere suppressed, and the country was practically free from political disturbance. Although the President ruled under the forms of constitutional democratic government, he was, in fact, a dictator with absolute power. This, however, he used with great wisdom, knowledge, and discretion, so that during his administration internal peace was maintained, and life and property became as secure in Mexico as in any country in the world. A cardinal feature of his policy throughout was the encouragement of foreign enterprise in the development of the boundless resources of the Republic. He promoted, by large subsidies, the building of railways, encouraged by means of protective tariffs the establishment of local industries, such as cotton and silk manufacture, the production of wine, cocoa, and quinine; he amended the forestry laws and introduced many reforms in elementary and higher education, and set the national finances on a sound basis. In this latter work he had the invaluable assistance of Señor Limantour, a

Frenchman settled in Mexico, whom he made Minister of Finance, and whose genius entitles him to rank among the great financiers of the world. Mexico City and other towns in the Republic were enormously improved and beautified and rendered healthy by the expenditure of large sums of money in building and sanitation, and the country, from being a byword for political unrest and misgovernment, was raised to a distinguished place among the nations.

One of the greatest reforms carried through by Diaz was the suppression of brigandage. He effected this by the bold and daring stroke of creating a force of mounted gendarmes (*guardias rurales*) recruited from among the brigands themselves. The transformation of these men from being murderers, thieves and robbers into trustworthy guardians of life and property was one of the most remarkable things accomplished by the President. Even in the recent disturbances which have convulsed Mexico, the "rurales," as they are colloquially termed, have almost without exception given their adhesion to the *de facto* Government of the country and discharged their duties with faithfulness and probity.

But all was not peace in Mexico under Diaz, though the troubles that arose were quickly suppressed, and with such a firm hand, that little notice was taken of them. On the Texas border there were occasional disturbances, and also in the Northern States of Coahuila, Nuevo Leon, Sinalao, and Tamaulipas. There were risings among the Maya Indians in Yucatan and the Yaquis of Sonora, and the Church also gave trouble, chiefly through attempts to evade the law forbidding the existence of conventional establishments in the Republic. In 1909, when Diaz was nearly eighty years of age, and was showing signs of failing physical power, an attempt was made to replace him by General Bernardo Reyes,[1] Governor

[1] Reyes was killed on February 9, 1913, in the Zocalo, Mexico City, at the opening of the revolt which overthrew President Madero.

of Nuevo Leon. This attempt was foiled by dispatching General Reyes to Mexico on a military mission, Mexican law requiring a candidate for the Presidency to be within the confines of the Republic during the election.

In the main, however, the history of the Diaz regime is concerned with the economic development of the Republic, though the country took an active share in all questions affecting the affairs of the American continent. Taking every factor into consideration, it can be said that the Diaz regime stands out pre-eminently as the brightest period in Mexican history since the country first became known to Europeans.

After the downfall and death of President Madero in February 1913, revolutions broke out in many parts of the Republic, and the Provisional President, General Huerta, raised the Army establishment to 80,000 of all ranks. In October 1913, immediately before the elections, General Huerta issued a decree increasing the personnel of the Army to 150,000 men. Ostensibly the reason for this increase was to cope with the revolutions in the Northern States, but in reality the cause of the increase was the fear, which is entertained by most Mexicans, of armed intervention on the part of the United States in Mexican affairs.

CHAPTER III

PHYSICAL CONFIGURATION

Physical configuration of Mexico—Area—Lakes, rivers, and mountains—The Tierra Caliente—Geology—Rainfall—Animal and plant life

MEXICO is a Federal Republic, officially styled the Estados Unidos Mexicanes. It has an area of 767,090 square miles, and a population estimated at 15,063,207. The area of the country varies somewhat according to the computations made by the geographers of different countries. By English authorities it is usually given as 767,005 square miles. The German estimate is 767,290, with which Mr. H. H. Bancroft, who quotes official figures, agrees. But the latest figures from Mexican Government sources give the area of the country as 765,537 square miles.

The average density of the population is about 19·6 per square mile, but the desert tracts of the north and the forest regions of the Tierra Caliente (Hotlands) are very sparsely inhabited. Although not a manufacturing country, Mexico has a very considerable proportion of urban inhabitants, large numbers of the inhabitants being congregated in the cities and towns.

For the most part the country consists of a vast elevated central plateau whose eastern and western margins are formed of two great mountain chains which rise in a succession of steep terraces from a low-lying coastal zone. The plateau for the most part lies at a considerable elevation. In the southern portion a large area is over 8000 feet above sea-

level, and it is nowhere less than 3000 feet. There are two noteworthy depressions in its surface—the Valley of Mexico and the Bolson de Mapimi, both of which formerly were occupied by large bodies of water. Several much reduced lakes still remain in the former. The latter now contains only shallow marshy lagoons. Extensive drainage schemes and the increasing dryness of the climate account for the change. The climate of the central plateau is somewhat arid, compared with the coastal zone, but the rainfall is usually adequate for the growth of cereals, and is admirably suited to the numerous varieties of cactus which are cultivated as regular crops. The plateau is entirely of volcanic origin, but this feature, as well as its purely mountain character, is obscured by the detritus and alluvial deposits which cover large portions and have buried the hills to a considerable depth, a circumstance which makes the study of its geology peculiarly interesting. South of Mexico City the plateau is occupied by a mountainous area in which a number of the rivers of Mexico have their origin.

The present northern boundary of the Republic was fixed at the close of the war with the United States in 1848 by the Guadalupe-Hidalgo Treaty, and by the Gadsden Treaty of 1853. This boundary follows the course of the Rio Grande del Norte from the mouth of that river until it crosses the parallel of latitude 31° 41′ north. It then runs due westwards along the parallel for 100 miles, when it bends south to latitude 31° 20′ north, and then west to the 111th parallel of west longitude. The frontier there takes a W.N.W. direction, until it reaches the Rio Colorado, about 20 miles below the junction of that river with the Gila, and from thence it runs almost due west to a point three miles south of the most southerly point of San Diego Bay.

The frontier with the United States has a total length of 1993 miles, of which 1136 is formed by the Rio Grande, the

remainder being a land frontier. On the south Mexico is bounded by the Republic of Guatemala and British Honduras. The boundary between Mexico and Guatemala, which is a purely artificial line, was for a long period the cause of much friction and contention between the two Republics, and was only finally determined in 1895. The frontier between the Republic and British Honduras was fixed by a Commission in 1893, and is formed mainly by the River Hondo down to the head of Chetumal Bay. Mexico's eastern boundary is formed by the Gulf of Mexico and the Caribbean Sea, and on the west by the Pacific Ocean. Mexico thus lies between 14° 31′ 42″ and 30° 42′ north latitude, and between 86° 6′ 8″ and 117° 30′ 31″ west longitude. Its greatest length is 1942 miles, and at its widest part is 762 miles across. The narrowest part of the Republic is in the Isthmus of Tehuantepec, where the distance from the Gulf of Mexico to the Pacific Ocean is only 134 miles. The total coast-line is 5486 miles in length, but in all this enormous distance there is only one good natural harbour, that of Acapulco, on the Pacific coast. The shape of the Republic has been compared with a gigantic cornucopia, an illustration not at all inappropriate, for the whole land teems with vast natural wealth.

The present area of Mexico is very much circumscribed from what it was at the period when the Spanish yoke was thrown off in 1821. At that date the national territories included a considerable portion of what is now the Western United States; but the result of the war of 1847, and a subsequent purchase under the Gadsden Treaty in 1853, reduced its area by nearly one million (930,590) square miles, which are now included in the States of Texas, New Mexico, Arizona, California, Nevada, Colorado, and other Western States of the American Union.

In physical configuration Mexico resembles South Africa;

CARVED STONES FROM THE PYRAMID OF THE SUN

that is to say,' it consists of a great central elevated plateau with a comparatively narrow coastal belt at a much lower elevation on either side. The central plateau, which occupies the greater portion of the Republic, rises gradually from an average elevation of about 3000 feet above sea-level at the centre of the American frontier to over 8000 feet towards the south in the State of Puebla. This plateau, which is fairly level, is bounded on both its eastern and western margins by ridges of volcanic mountains. Some of these, like Ixtaccihuatl, Popocatepetl, and Orizaba, rise above the line of perpetual snow and form very conspicuous features in the landscape. In the western ridge on the Pacific slope, one of the volcanoes, Colima, is still active. These ranges of mountains are known generally as the Sierra Madre Occidental and Sierra Madre Oriental. The central plain of the plateau is broken here and there by ill-defined transverse ridges of hills, the principal of which is known as the Cordillera de Anahuac. In the south-east there is a detached mountainous area, and in the extreme east the Peninsula of Yucatan forms a low sandy promontory, jutting out between the Caribbean Sea and Gulf of Mexico. This tract is very arid and barren, but its soil is suitable for the growth of the peculiar species of cactus from which the valuable henequen, or sisal-fibre, is extracted.

On the western coast the long narrow peninsula of Lower California, which is almost entirely barren owing to the absence of adequate rainfall, is separated from the mainland by the Gulf of California. A ridge of barren mountains runs down the centre of the Peninsula, and is a continuation of the Sierra Nevada of California. The Peninsula possesses, like the rest of Mexico, considerable mineral deposits, but owing to the absence of water and the lack of labour very little development has taken place.

The physical conformation of Mexico presents some very interesting features. The great central elevated plateau

rises from the low sandy coast-lands of the Tierras Calientes by a succession of steep terraces to a height of over 8000 feet a little south of the City of Mexico. Its general slope is towards the north, where, as already stated, it falls away to an elevation of only 3000 feet at the American border. According to geologists the site of the plateau was originally a series of vast troughs which were gradually filled up by material thrown out from innumerable volcanoes and by the detritus washed down from the sides of the mountains in the course of ages. The central plateau, therefore, really consists of an accumulation of volcanic debris overlain by detritus and alluvial matter which have buried the surrounding ring of mountains to a depth of at least 8000 to 10,000 feet. Out of this mass of material the existing valleys and depressions in the plateau have been excavated by the action of rivers and streams in recent geological time. The structure of the Valley of Mexico, within which the capital of the Republic is situated, is typical of the great plateau as a whole. This valley, which is about 50 miles long by 40 miles wide, is of irregular elliptical shape, surrounded by a ring of volcanic mountains. At one time its surface was occupied by a series of seven great lakes, only one of which contained fresh water, the remainder being salt. These, by drainage and the gradual desiccation of the country, through change of climate, have been gradually reduced in area, and the only considerable one now remaining is Lake Texcuco, which lies about four miles from Mexico City.

Some of the highest mountains of Mexico are included in the ridges which surround the valley. Two of these, Popocatepetl and Ixtaccihuatl, rise to a height of nearly 18,000 feet, and are covered with perpetual snow. These mountains are entirely of volcanic origin, and consist mainly of porphyry and trachytic lava. There are also very large formations of trap rocks composed of silica and volcanic ashes. This

formation is found scattered everywhere throughout the Republic, and its material makes an excellent building-stone. The surface is pitted with numerous small holes which, when filled with mortar in the process of building, form walls that resist the disruptive effect of earthquakes to which Mexico is very subject. Houses built with this stone by the Spanish conquerors more than three hundred years ago still exist in an almost perfect state of preservation, despite the lapse of time and the frequent earthquake shocks to which they have been subjected.

The rivers of Mexico are, for the most part, comparatively short and unsuitable for navigation. On both the eastern and western coasts, owing to the configuration of the country, their courses are interrupted by numerous falls which, although insuperable objects to navigation, afford splendid opportunity for the development of water power. These falls are now being largely exploited for the production of electric current, especially in the neighbourhood of Orizaba, and at Necaxa, in the State of Puebla, where the existing installation gives over 100,000 horse power. The current is used for lighting the City of Mexico, 100 miles away, and for driving its factories and the street railroads. Power is also supplied to the gold-mines at El Oro, nearly eighty miles beyond the city.

One of the chief rivers is the Rio Grande, which, rising in the State of Colorado, has a total length of 1500 miles. This stream forms the larger part of the boundary line between Mexico and the United States, but it is shallow and sandy throughout the greater part of its course, and is of very little value for navigation. Its waters, however, are used at different points in connexion with the irrigation schemes, which are absolutely necessary for the development of agriculture throughout most of the country through which the river flows. The Rio Lerma rises in the mountains south of Toluca, near the most southerly portion of the plateau. It passes through

Lake Chapala, and finally empties into the Pacific at San Blas. It has a total length of 540 miles. During its course down from the high country to the coast the river precipitates itself over the great falls of Juanacatlan, the so-called Niagara of Mexico, near the City of Guadalajara. The Rio Balsas has a course of 426 miles. It also rises in the central plateau and flows into the Pacific at Zacatula.

Among the smaller streams flowing into the Pacific having their origin in the northern portion of the Republic are the Rio Fuerte and the Rio Yaqua. On the eastern side of the Republic the Rio Panuco, which rises in the northern part of the central plateau, discharges its waters into the Gulf of Mexico at the City of Tampico. Its estuary forms the harbour of that city which, in consequence of the recent improvements carried out in connexion with the oil industry, affords accommodation for large ocean-going steamers. The Papaloapam flows through the States of Oaxaca and Vera Cruz, but for the greater part of its course it is a very shallow and rapid stream, and is unsuitable for the passage of vessels of any burden. Its principal tributary, the Rio Tonto, is in many respects the most remarkable river of Mexico. It is a very deep, wide stream. In parts of its course it has a depth of over 500 feet, and has probably an average depth of over 60, with a very sluggish current. It would afford accommodation for very large vessels, but these cannot reach it owing to the shallowness of the Papaloapam, into which it flows.

The Rio Coatzacoalcos rises in the Isthmus of Tehuantepec. It has a short course, but a considerable stretch in the lower reaches is sufficiently deep and wide to enable vessels up to 5000 tons to ascend as high as Minatitlan, about 34 miles from its mouth. There is a considerable amount of shipping on this river in connexion with the oil refineries that have been established at Minatitlan. The harbour of Puerto Mexico at its mouth is the eastern terminus of the Trans-Isthmian

Railway, and is a place of call for several lines of ocean-going steamers. Large developments are in progress, and the river will probably become the centre of a very important trade. The Peninsula of Yucatan has no rivers at all. There are but one or two small streams in the whole territory. These flow only after thunderstorms, and are dry for the greater part of the year.

The mountains of Mexico for the most part are situated along the outer edges of the great central plateau, and form its boundaries. There are two distinct ranges. One of these follows roughly the line of the Pacific coast in the States of Sonora, Chihuahua, Sinaloa, and Durango. In the northern portion of the range in the State of Sonora it is broken into a series of parallel ridges which form an interminable series of hills and valleys, many of them covered with dense forests. This district will one day be the centre of a very important lumbering industry. These mountains are known by different names in various parts of their course. The principal ridges are the Sierra de Nayarit, the Sierra del Durango, the Sierra del Nazarino, the Sierra Fuerte, and the Sierra Yaqui. This latter range of hills is the home of the turbulent Yaqui Indians, who have never become completely civilized, and have again and again given serious trouble to the Central Government. They have repeatedly broken out into revolt, and fled to the hills when defeated by the Central Government troops. In the latter days of Señor Diaz's Presidency the policy was adcpted of sending the Yaquis who were captured to the plantations in Yucatan, where they were employed on the plantations under conditions practically indistinguishable from slavery.

In the State of Jalisco the western mountain chain is divided into two, the eastern of which crosses the southern portion of the plateau and forms its western and southern boundary. The other branch of the range runs south through

the States of Michoacan, Guerrero, and Oaxaca to the Isthmus of Tehuantepec, and is really a continuation of the great continental Pennine range which in South America rises into the lofty summits of the Andes, and in the United States forms the vast chain known as the Rocky Mountains. The Sierra Madre Occidental nowhere contains any peaks so high as those of Orizaba, Popocatepetl, and Ixtaccihuatl in the Sierra Madre Oriental. The greatest elevations in the western range are the Nevada de Colima (14,363 feet) and the volcano of Colima (12,750 feet) in the State of Jalisco. Two other peaks, Cerro Pimal and one in the Cerro Delamo, rise to over 10,000 feet. Viewed from the coast these elevations present the appearance of lofty and imposing mountains, but seen from the plateau, in which they are buried to a depth of about 8000 feet, they appear merely as low and comparatively inconspicuous hills.

The eastern mountain range extends in a series of interrupted chains from the great bend of the Rio Grande, on the northern border of the State of Coahuila, southward along the edge of the plateau to the southern portion of the State of Oaxaca. It then sinks by a series of abrupt terraces into the inconspicuous ridges of the Isthmus of Tehuantepec. In the State of Chiapas there is an isolated mountainous tract. Throughout the northern part of its course the range runs for the most part roughly parallel to the coast, and interposes but little obstacle to the railways which run from the United States frontier. South of parallel 22, north latitude, the ridges coalesce into one single lofty chain along the western frontier of Vera Cruz. The highest mountains in Mexico are found in this portion of the range. Among these are the snow-capped peak of Orizaba and the isolated summit of Malinche, near the City of Puebla, which rises directly from the central plateau. This mountain was named after Cortes's celebrated Indian mistress, and has a height of

14,636 feet. A little farther to the west, between Malinche and the City of Mexico, are the still higher mountains of Popocatepetl and Ixtaccihuatl. These Indian names mean, in the first case, the "smoking mountain" (although the volcano is now extinct and no longer emits smoke), and the "sleeping woman." This latter name is very descriptive of the appearance which the mountain presents from the south-west. Its lofty snow-covered ridge bears a remarkable resemblance to the form of a white-clad woman lying on her back. Both these mountains, like all the others in the range, are of volcanic origin, though they have been long since extinct. Popocatepetl and Ixtaccihuatl do not form part of the main range, but belong to an irregular series of peaks which crosses the southern part of the great plateau and form a watershed between its northern and southern slopes.

Several of the summits in this area attain a height of from 10,000 to 12,000 feet, especially in the region known as the Monte del Cruces. At the southern extremity of the range it breaks down in a series of abrupt terraces which form the most picturesque region of the Republic. Along the base of the mountains are vast stretches of very fertile soil admirably adapted to the growth of sugar, coffee, bananas, and other tropical products.

Near the coast of the State of Vera Cruz is the isolated volcano of Textla, 9,708 feet high. This mountain was formerly very active, but it has been quiescent since the great eruption of March 1793. Earthquakes are very frequent in this region, and indeed throughout the southern part of the Republic generally. Mexico City has suffered severely on many occasions from this cause, and was violently shaken in 1911, when much damage was done and a number of lives were lost. In 1909 Chilpancingo, in the State of Guerrero, was reduced to ruins by an earthquake, which was accompanied by a serious loss of life.

Humboldt has advanced the theory that about the 19th parallel of north latitude there is a deep fissure in the earth's crust through which the energies of the subterranean fires exert their force in piling up the series of volcanic peaks which exist in this region. Egloffstein, in his work on Mexico, states : " Only on the supposition that these volcanoes, which are on the surface connected by a skeleton of volcanic rocks, are also united under the surface by a chain of volcanic elements which in the direction mentioned cause the American continent from the Gulf of Mexico to the Pacific Ocean to oscillate at the same time, can the phenomenon which occurred be explained."

The Tierra Caliente, or coastal zone, to which reference has already been made, varies in width from about 60 to a little over 100 miles. It is low and sandy for the most part, and is in many places very unhealthy, the inhabitants being subject to various forms of pernicious malaria and other tropical fevers. This is particularly the case along the shores of the Gulf of Mexico. Where the coastal zone begins to rise towards the mountain terraces the soil is very fertile, and produces heavy crops of sugar and coffee. The neighbourhood of the city of Orizaba is in the centre of this fertile belt.

Many lagoons, almost entirely isolated from the sea, extend along the shores of the Gulf from the American frontier southward to the Bay of Campeché. These are especially numerous in the State of Tamaulipas from the mouth of the Rio Grande southward to Tuxpan, in the State of Vera Cruz. Farther south on the shores of the Bay of Campeché is the great Laguna de Términos. The coastal lagoons in many places, especially between Tampico and Tuxpan, afford a safe passage along the coast for long distances to vessels drawing up to 15 feet of water, and extensive navigation works have been carried out in deepening the channel for this purpose.

The islands of Mexico are few and comparatively unim-

portant. For the most part they are barren and uninhabited. Carmen, Mujeres, Cancum, and Cozumel are the only islands which support a considerable population.

Mexico has few lakes in proportion to its area. The most considerable of them are situated on the plateau in the neighbourhood of Mexico City, but even these are diminishing in area and show signs of ultimately drying up. Texcuco is the largest of the plateau lakes, and has an area of 11½ square miles. Until the great drainage works were completed by President Diaz this lake was always a menace to Mexico City, and was the cause of frequent inundations; some of which kept the city flooded for over two years at a time. Xochimilco is smaller in area than Texcuco, but its waters are fresh, and a large portion of the water supply for Mexico City is obtained from springs which have been discovered in its bed.

The salt lakes near Mexico City are remarkable for producing a very singular article of food known as "Mexican caviare." Vast swarms of flies deposit their eggs on the sedges and water plants growing along the margin of the lakes, where they hang in rough agglutinated masses resembling large bunches of minute grapes. These eggs are collected by the Indians, pressed into cakes, and dried in the sun. They form an article of diet much appreciated by the poorer classes of the city at certain seasons of the year.

The much reduced remains of a once vast series of lakes occupy lacustrine depressions in the State of Coahuila. The most extensive lake in the Republic is Chapala, in the State of Jalisco. It covers an area of nearly 300 square miles, and is formed by an extension of the Rio Lerma. Patzcuaro and Cuitzéo, in the State of Michoacan, are two fairly large lakes, and numerous smaller lakes and tarns are situated here and there among the mountains.

The works carried out in connexion with the utilization of the waters of the Necaxa and other rivers in the State of Puebla

for the generation of electric power have created a number of artificial lakes, some of which are of considerable extent. One of these, known as the Tenango Dam, has an area of nearly 20 square miles, and works which will result in the creation of a still larger body of water have been projected by the Mexican Light & Power Co. at Amayotlan.

Mexico, despite its coast-line of nearly 6000 miles, has no really good harbour, with the exception of Acapulco, on the Pacific coast, in the State of Guerrero, but it is isolated from the rest of the country owing to the absence of railway communication. The principal port of the Republic is Vera Cruz, on the Gulf of Mexico, and more than half the total imports and exports of the Republic pass through it. Until recent years the harbour of Vera Cruz was merely an open roadstead. Vessels using it had to seek safety by putting out to sea during the prevalence of "Northers," as the violent storms which sweep down the east coast during the winter months are termed. A few years ago, however, an extensive series of breakwaters was built by an English firm for the Mexican Government, so that now the harbour is safe for shipping in all weathers.

Tampico, at the mouth of the Rio Panuco, has risen into importance since the discovery of oil in Mexico, for which it is the chief place of export. Puerto Mexico, on the estuary of the Coatzacoalcos, since the removal of the sand bar which obstructed navigation and the construction of facilities for handling cargo, has also become a very busy and important port. Vessels of over 15,000 tons can load at the wharves, and large annual shipments of oil, from the oilfields in the southern portion of Vera Cruz, and general cargo carried across the Isthmus by the National Railway of Tehuantepec from the Port of Salina Cruz on the Pacific, are now made through it.

Practically the whole of the sugar and other produce from the Hawaiian Islands now reach the United States by this route.

ARCH AT OZUMBA

Salina Cruz, the Pacific terminus of the Isthmian Railway, is an entirely artificial harbour constructed by the firm of S. Pearson & Sons (London), who also carried out the harbour works at Puerto Mexico and Vera Cruz for the Mexican Government.

Progresso, in Yucatan, has a considerable trade, but vessels have to lie at least six miles off the coast when discharging cargo, owing to the shallowness of the water. Matamoros, at the mouth of the Rio Grande, Carmen, and Frontera are the only other ports on the east coast requiring mention. They are only suitable for small vessels. In the territory of Quintano Roo, east of Yucatan, and also on the Pacific coast, there are a number of deep and well-sheltered bays, but they are isolated from the rest of the country by mountain ranges, and, owing to the absence of railways, have little or no trade.

The main features of the geological formation of Mexico, as already mentioned, are of volcanic origin, but large tracts are overlaid by cretaceous and other deposits of a later date. Crystalline rocks are comparatively rare. The largest series of this formation is in the State of Oaxaca, but small areas of similar rocks are found in Chiapas, Oaxaca, and other States. These rocks are assumed by geologists to be very ancient, but owing to the absence of fossil remains their age cannot be fixed with any certainty. The only fossils accurately identified belong to the carboniferous period. There are immense deposits of limestone in various parts of the country. These form a large part of the bulk of the eastern range of mountains, and also occupy considerable tracts in the central plateau. Throughout practically the whole of the Republic immense masses of the igneous rocks have been forced through the cretaceous formations which, where they have been in contact with the volcanic elements, have been considerably altered in structure. The marbles and similar rocks which exist owe their origin to this cause.

Throughout the Isthmus of Tehuantepec the limestone is underlaid by an immense bed of salt. Recent borings for oil in this locality indicate that the salt beds below the limestone have an average thickness of about 1000 feet. No attempt has yet been made to develop these deposits commercially. The Mesozoic beds are important, but only a few scattered remains of the Triassic and Jurassic systems have been identified in widely scattered localities. Sedimentary deposits of the Tertiary period cover large areas, especially in Puebla, Oaxaca, and along the coast of the Gulf of Mexico. The most important rocks of the Tertiary period consist of volcanic lavas, ashes, and agglomerations. These cover enormous areas in all parts of the Republic, and are largely developed in the western portion of the country.

The era of volcanic activity is supposed to have begun with the ejection of syenites and diorite, followed by the basalt and lava. The date at which these eruptions occurred was probably towards the close of the Tertiary or beginning of the Eocene period. During the Miocene and Pliocene periods these eruptions continued with the pouring out of basalt in enormous quantity.

The mineral wealth for which Mexico is famous is chiefly found in the volcanic rocks. Silver and gold and the industrial metals, iron and copper, are found in many parts of the Republic, and in such quantity as to justify Humboldt's description of Mexico as " the World's Treasure-House."

Mexico, except in the hot lands along the coast, has on the whole an agreeable and healthy climate. The altitude of the great central plateau, which occupies the greater portion of the country, ensures a moderate temperature, although a large part of the country lies within the tropics. Mexico extends through 17 parallels of latitude, and the tropic of Cancer crosses the country about midway between its northern and southern boundaries. The extremes of

temperature which this situation would seem to indicate are greatly modified by the physical configuration of the country. It is only in the coastal zone and in the low-lying States of Campeché and Tobasco, in the Peninsula of Yucatan, the Isthmus of Tehuantepec, and parts of Chiapas that true tropical conditions obtain. Mexico presents every variation of climate from that of the torrid tropics to arctic conditions in the snow-capped summits of the mountains. The vegetation of the country is equally varied. In the Tierras Calientes the mean temperature averages from 77 to 82 degrees Fahrenheit, but it rises occasionally as high as 110 in some parts of Vera Cruz, and at various points along the Pacific coast.

Three distinct zones are recognized: the Tierra Caliente on the coast, and in the less elevated portions of the Republic; the Tierra Templada, which includes the foothills of the mountains up to 5500 feet and "comprises the greater portion of Coahuila, Nuevo Leon, San Luis Potosi, parts of Vera Cruz, Oaxaca and Chiapas, and large portions of Guerrero, Jalisco and Sonora, and also portions of the inland States of Puebla, Marelos, and Michoacan. The mean annual temperature of this region is about 75 degrees Fahrenheit." Above the Tierra Templada is the so-called Tierra Fria, or the cold country, which occupies the area above 6000 feet. It includes the higher portion of the Mexican plateau and the mountain ranges which rise from it. During the day this so-called cold country is warm and sunny, but the nights are always cool and pleasant. It corresponds in general character to the temperate regions of the central United States, where frost is of rare occurrence. Sub-tropical vegetation everywhere flourishes throughout the Tierra Fria where there is a sufficient rainfall. In Mexico City, which is nearly 8000 feet above the level of the sea, palms flourish in the open air and the beautiful purple bougainvilla thrives to perfection.

The mountains which rise above the plateau ensure a

sufficient precipitation over a very wide area, but in its northern portions the rainfall is scanty, and the country is generally dry and arid. Most of the cereals can be grown on the plateau, and the higher regions, which correspond to the climate of the northern regions of the temperate zone, are also well suited to the cultivation of cereal crops and the prosecution of the grazing and lumbering industries. Higher up the mountains are covered with perpetual snow and ice, and reproduce entirely arctic conditions.

Throughout the greater part of Mexico the four seasons of the temperate zone are not well marked. The year is divided into a rainy season, which extends from May to October, and the so-called dry season, which prevails during the remainder of the year. North of the 28th parallel of latitude the seasons are similar to those which prevail in the southern part of the United States. The rainfall is very unequally distributed, and the seaward slopes of the eastern mountain ranges receive a large share of the total precipitation. In the neighbourhood of Jalapa (6000 feet) a very humid climate prevails, with a considerable amount of rain throughout the year. The mountains along the eastern coast condense most of the moisture from the Gulf of Mexico, and the winds blowing inland are dry and give practically no rainfall on the plateau.

On the Pacific coast the area of calms, known as the " horse latitudes" cross the northern part of Lower California and Sonora. The breezes which prevail in this part of the country carry little or no moisture for the greater part of the year, a circumstance which accounts for the extreme aridity of this portion of the plateau. Evaporation is very rapid throughout the whole of the central part of the Republic, and much of the benefit of the rainfall is lost from this cause. In the Valley of Mexico large irrigation schemes are in operation or being projected for the utilization of the large deposits of artesian water which lie deep beneath the surface.

Along the Gulf coast during the winter the "northers" which blow down from the United States distribute a heavy rainfall along the eastern slopes of the mountains, especially in portions of Vera Cruz and eastern Oaxaca. This rainfall renders the district very favourable for the cultivation of coffee, sugar, and bananas, and makes it suitable for the prosecution of cattle-raising, and also encourages a dense growth of tropical forest.

Mexico has a very varied fauna, which is generally characteristic of that of the central and northern portion of the South American continent. At least five distinct species of monkey are known, and the predatory animals include the jaguar, puma, ocelot, wolf, coyote, lynx, badger, and otter. Bears are numerous in certain localities. The tapir is still plentiful in forest regions, and there are several species of peccary, and wild pig. Other species include the opossum, skunk, porcupine, kinkajou, deer (three species), wild sheep (*ovis mexicanus*), squirrels, rabbits, gophers, and many other small rodents. The iguana (which is readily eaten by the Indians) and other lizards abound in infinite variety, and frogs and toads are represented by numerous species. Snakes are exceedingly numerous, including many varieties, both poisonous and non-poisonous. Rattlesnakes are very plentiful everywhere in the drier part of the country, and boa-constrictors are found in the tropical jungles. Several varieties of turtle frequent the coasts and lagoons for breeding purposes, where the capture of the green and the tortoiseshell turtle forms the basis of a considerable industry. The fur-bearing seal visits the coasts of Lower California, and valuable pearl fisheries exist in the same region. The seas and some of the rivers swarm with fish, but fishing, as an industry, is not pursued extensively, and is entirely unorganized. In the coastal rivers alligators and fresh-water turtles are very numerous. In sluggish streams like the Rio Tonto in the

State of Oaxaca, these reptiles are seen by hundreds in the quieter reaches.

Mexico is a paradise of bird life. In the southern portion of Vera Cruz and parts of Oaxaca and the Isthmus of Tehuantepec the white heron, which has been almost entirely destroyed in many tropical and sub-tropical regions, is still to be seen in large flocks. Wild turkeys are common in many places; parrots, paroquets, and macaws exist in immense numbers. Other species of birds include toucans, trogons, herons, ibises, spoon-bills, boat-bills, cranes, ducks, pelicans, cormorants, bitterns, curlews, snipe, sandpipers, grackles, kingfishers, woodpeckers, jays, cuckoos, weaver-birds, tanagers, mocking-birds, partridges, quail, pigeons, doves, eagles, hawks, falcons, crows, and buzzards. The black-faced zopilote (a species of turkey-buzzard), which are the scavengers of the country, are found everywhere, particularly along the coasts. A conspicuous and beautiful feature of the avifauna are the humming-birds, of which numerous species are known, and there is a vast variety of small song-birds.

Mexican birds are many of them famous for the brilliance and beauty of their plumage. One of these, the quetzal (*trogon resplendens*), has feathers of such magnificent colouring that, according to tradition, its plumage was reserved by the ancient Aztec sovereigns for their own personal use.

Insects are in many places a veritable plague. Butterflies, beetles, and moths exist in myriads, and mosquitoes, midges, "pinaleros," fleas, and other blood-sucking insects make life a burden during the rainy season in the Tierra Caliente. There are several species of fly which have the objectionable habit of laying their eggs in the skin of both animals and human beings. The grubs, when hatched out, ruin the hides of cattle and sheep, and produce horrible sores in the human subject.

There are many species of ants in Mexico. One of these carries on regular agricultural operations. It collects leaves,

which it cuts into minute pieces, and arranges them in regular beds in subterraneous galleries. These beds ferment, and produce a species of fungus that constitutes the food of the insects. These ants are very destructive, especially in the fruit-growing districts, as they will sometimes strip a tree entirely of its leaves in the course of a few hours. White ants, or termites, are also numerous, and cause immense damage. There are many species of bees, and honey is both cheap and excellent throughout the greater part of Mexico.

There are also numerous species of spiders, among which the tarantula and mygale are specially dreaded because of their venomous, and sometimes fatal, bite.

The most conspicuous feature of plant life in Mexico is the cactus, of which over a thousand separate species have been identified by botanists. These plants grow everywhere, but present their most remarkable development on the central plateau, where several species, but especially the giant aloe (*agave americanus*), are cultivated for the production of pulque, the favourite alcoholic drink of the Mexican people. On the plateau, especially between Boca del Monte and Mexico City, enormous tracts, sometimes many square miles in area, are planted with this species of cactus, and immense fortunes have been made by the "hacendadoes" in the manufacture of pulque from its juice. Other species of cactus are cultivated for the production of fibre. One of these (*agave rigida*), which produces the valuable sisal hemp, is grown chiefly in the peninsula of Yucatan, where it is a large and flourishing industry. One variety of Mexican cactus, the nopal, has been spread over a large part of the tropical world under various names, such as Indian fig, prickly pear, etc. It figures in the national arms of the Republic.

In the higher regions oaks, pines, and junipers form the principal forest trees, and large cypress forests are found on the southern slopes of the mountains in several places.

In the lower regions, where the rainfall is heavy, magnolias, crotons, mimosas, acacias, myrtles, plane trees, and bamboos are found. The chestnut abounds in many places. Palms in great variety grow everywhere in the Tierra Caliente, and in the tropical forests there is an infinite growth of valuable timber trees, and medicinal plants far too numerous to mention in the present volume. Among these are mahogany, rosewood, Spanish cedar, ceibas (silk cotton tree), Brazil wood, and various kinds of zapote, which not only produce beautiful cabinet woods, but also bear excellent fruit. The juice of one species of zapote, the chichele, is the basis of the chewing-gum so largely used in the United States, and practically the whole production of Mexico goes to that country. Logwood and other plants used in dyeing are found in great variety.

Rubber, both that derived from the ordinary rubber vines and from the guayule shrub, is very plentiful, and among medicinal plants which Mexico produces are julap, ipecacuanha, sarsaparilla, and anatto, while the well-known flavouring vanilla is indigenous to Mexico and grows wild in the forests.

Indian corn flourishes everywhere. Mexico is now believed by botanists to be the original home of this important cereal, which forms the principal food of the great bulk of the Mexican people.

Many varieties of beans are native to the country. Peppers, both red and black, are cultivated extensively, and edible fruits exist in endless variety. These include the fruit of several varieties of zapote, the guava, tamarind, avocada pear, bananas, plantains, pineapples, grapes, oranges, lemons, cocoanuts, granadas, tomatoes (indigenous to the country), ciruelas (Mexican plum), mangoes, olives, gourds and melons, and other edible fruits, many of which are known only to the Indians dwelling in the remote forests.

Beautiful orchids, many of which have never been classified

by botanists, grow in infinite variety and profusion. The potato grows wild, and among the cultivated root crops are both the common and the sweet potato, onions, yams, and pea-nuts. Sugar-cane, cotton, coffee, and indigo are also extensively cultivated.

At the time of the Spanish Conquest Mexico was much more extensively afforested than it is at the present time, but the Spaniards in the early years of their occupation wilfully destroyed vast areas of timber. The natives themselves also did much damage by burning, so as to clear the ground for their crops of Indian corn. But even now there are forests covering enormous tracts of Mexico, and under suitable administration could be made a great source of wealth, which has hitherto been almost entirely neglected.

CHAPTER IV

POLITICAL ORGANIZATION

Constitution and administration — Political organization — Army and Navy—Methods of recruiting—Character of Mexican military forces

THE Republic of Mexico is roughly equal in size to that portion of the United States which lies east of the River Mississippi, but excluding the States of New York, Vermont, New Hampshire, and Maine. It is divided, for administrative purposes, into twenty-seven states, three territories, and a federal district—a system obviously borrowed from that of the United States, where, as in Mexico, the federal capital is situated in a district directly administered by the Central Government. In the census tables the different States are classified according to their geographical relation to each other in the following order :—

	Capitals.	Population of Capitals.	
		1900.	1910.
Central States.			
Aguas Calientes . .	Aguas Calientes	35,052	44,800
Durango . . .	Durango	31,092	34,085
Guanajuato . . .	Guanajuato	41,486	35,147
Hidalgo . . .	Pachuca	37,487	38,620
Mexico	Toluca	25,940	31,247
Morelos	Cuernavaca	9,584	12,668
Puebla	Puebla	93,521	101,214
Querétaro . . .	Querétaro	33,152	35,011
San Luis Potosi . .	San Luis Potosi	61,019	82,946
Tlaxcala . . .	Tlaxcala	2,715	2,812
Zacatecas . . .	Zacatecas	32,866	25,905
Federal District . .	City of Mexico	368,898	470,659

	Capitals.	Population of Capitals.	
		1900.	1910.
Northern States.			
Chihuahua	Chihuahua	30,405	39,061
Coahuila	Saltillo	23,996	35,063
Nuevo Leon	Monterrey	62,266	81,006
Sonora	Hermosillo	10,613	14,518
Gulf States.			
Campeche	Campeche	17,109	16,864
Tabasco	San Juan Bautista	10,543	12,084
Tamaulipas	Ciudad Victoria	10,086	17,861
Vera Cruz	Jalapa	20,388	24,816
Yucatan	Merida	43,630	61,999
Territory of Quintana Roo	Santa Cruz de Bravo	—	2,258
Colima	Colima	20,698	25,148
Chiapas	Tuxla Gutierrez	9,395	10,217
Guerrero	Chilpancingo	7,497	7,848
Jalisco	Guadalajara	101,208	118,799
Michoacan	Morelia	37,278	39,116
Oaxaca	Oaxaca	35,049	37,469
Sinaloa	Culiacan	10,380	13,578
Territory of Lower California	Ensenada	1,726	2,177
	La Paz	5,046	5,456
Territory of Tepic	Tepic	15,488	16,805

The following additional list gives the States in alphabetical order, with post-office abbreviations, and their area and population :—

States and Territories with Abbreviations.	Area Square Miles.	Area Square Kilometres.	Population 1900.	Population 1910.
Aguas Calientes (Ags)	2,969	7,692	102,416	118,978
Campeche (Cam)	18,086	46,855	86,542	85,795
Chiapas (Chis)	27,222	70,524	360,799	436,817
Chihuahua (Chih)	89,974	233,094	327,784	405,265
Coahuila (Coah)	63,728	165,099	296,938	367,652
Colima (Col)	2,273	5,887	65,115	77,704
Durango (Dgo)	42,265	109,495	370,294	436,147
Guanajuato (Gto)	10,948	28,363	1,061,724	1,075,270
Guerrero (Gro)	24,996	64,756	479,205	605,437
Hidalgo (Hgo)	8,575	22,215	605,051	641,895
Jalisco (Jal)	33,486	86,752	1,153,891	1,202,802
Mexico (Mex)	8,949	23,185	934,463	975,019
Michoacan (Mich)	22,656	58,694	935,808	991,649
Morelos (Mor)	2,734	7,082	160,115	179,814
Carry forward	358,861	929,693	6,940,145	7,600,244

States and Territories with Abbreviations.	Area Square Miles.	Area Square Kilometres.	Population 1900.	Population 1910.
Brought forward .	358,861	929,693	6,940,145	7,600,244
Nuevo Leon (N.L.) . .	23,679	61,343	327,937	368,929
Oaxaca (Oax) . . .	35,383	91,664	948,633	1,041,035
Puebla (Pue) . . .	12,204	31,616	1,021,133	1,092,456
Querétaro (Qro) . . .	4,492	11,638	232,389	243 515
San Luis Potosi (S.L.P.) .	24,000	62,177	575,432	624,748
Sinaloa (Sin) . . .	27,553	71,380	296,701	323,499
Sonora (Son) . . .	76,619	198,496	221,682	262,545
Tabasco (Tab) . . .	10,072	26,094	159,834	183,708
Tamaulipas (Tam) . .	32,268	83,597	218,948	249,253
Tlaxcala (Tlax) . . .	1,595	4,132	172,315	183,805
Vera Cruz (Ver) . . .	29,283	75,863	981,030	1,124,368
Yucatan (Yuc) . . .	18,565	48,097	309,652	337,020
Zacateças (Zac) . . .	24,467	63,386	462,190	475,863
Federal District (D.F.) . .	579	1,499	541,516	719,052
L. California (Ter.) (B. Cfa.) .	58,328	151,109	47,624	52,244
Tepic (Ter.) (Tep.) . .	10,951	28,371	150,098	171,837
Quintana Roo (Ter.) (Q.R.) .	16,638	43,104	Included in the State of Yucatan at this date.	9,086
Total .	765,537	1,983,259	13,607,259	15,063,207

The Federal District is situated in the south-eastern portion of the Valley of Mexico. It includes an area 30 miles long by about 25 miles from east to west, with the capital near its central part. This district has always been the focus of Mexican life. In Aztec times, as now, it was the seat of government. A glance at the map will show that the group of so-called Central States are all isolated from the seacoast. They were the scene of the principal activities of the Spanish conquerors in the early days of New Spain, as Mexico was then called. They contain within their borders the richest mines, the largest cities and towns; and the history of the country from the time of the Conquest down to very recent years is mainly concerned with their progress and development. A large

proportion of the entire population of the country is concentrated within them, and agricultural and other industries have here reached their highest productiveness. The four principal Northern States are also mainly inland states, Sonora alone having a coast-line on the Pacific. For the most part the Northern States are arid and barren, and are very thinly populated, but their mountains contain rich mineral deposits, which will no doubt one day be exploited. The Gulf States are those which border on the Gulf of Mexico. They were the first portion of American territory discovered by the Spaniards; but as the climate was hot and tropical, and the tracts immediately along the coast sandy and unfertile, the Spanish adventurers preferred to dwell in the higher and more healthy climate of the central plateau. As has already been pointed out in another chapter, some of these States possess large areas of very fertile soil, covered, however, to a great extent with forests. Settlement was proceeding rapidly in these districts until within the last two years, when the internal disorders in the Republic checked the flow of emigration from the United States.

In Yucatan the production of sisal fibre from a species of cactus has developed into a very flourishing industry, but it, within the last few years, has been greatly surpassed in importance by the discovery of oil at many points in the Gulf States.

The Pacific States form a long and comparatively narrow strip along the western coast. Their inland portions have, on the whole, the same character as the central plateau, but the coastal region is low, hot, and sandy. Several good harbours exist in these States, but their development has been checked by the lack of adequate railway facilities, and they have as yet but a sparse population. There are, however, considerable tracts well suited for cattle-raising and other agricultural industries, and a large number of settlers have

moved into these in recent years. This movement is likely to proceed at an accelerated rate as soon as settled internal conditions have again been established.

The territories of Lower California, Quintana Roo, and Tepic are administered directly by the Federal Government, but, with the exception of the latter, they have only a very small population. Lower California, owing to its arid climate and the absence of sufficient rainfall, is never likely to have a large population, though it is said to contain important mineral deposits.

The Constitution, which is given in full in an appendix to this volume, was originally promulgated in February 1857. It provides for the establishment of a Federal Republic composed of sovereign States which, as in the United States of America, have complete control over everything that concerns the internal administration. These States are, by the terms of the Constitution, united in a single Federal Republic. The Supreme Government is nominally arranged in three great branches—the Legislature, Executive, and Judicial. In actual practice, however, the President for the time being virtually exercises control over both the Legislature and the Judiciary. Legislative power is vested in a General Congress consisting of two Chambers—the Chamber of Deputies and the Senate. According to the Constitution, the Deputies are elected directly by the citizens, and their term of office extends over a period of two years. A system of proportional representation obtains, which allows one Deputy for every 60,000 inhabitants; but an electoral district with a population below this number is entitled to choose a Deputy provided the inhabitants are not less than 20,000. For every Deputy entitled to sit in the Chamber a substitute is named, who undertakes his duties in case of removal by death or other cause during his term of office. Deputies, both actual and substitute, must be at least twenty-five years of age. They must be resident

in the State or Territory from which they are chosen, and they cannot under any circumstances be clergymen in Holy Orders.

The Senate is composed of two Senators from each State, including the Federal District. They are chosen in the same manner as the members of the Chamber of Deputies, and are subject to the same restrictions with regard to citizenship, residence, and civil status, but they must have attained the age of thirty years before they can be elected. Their term of office is four years, but, according to the Constitution, one-half the members of the Senate retire every two years. This provision secures that 50 per cent of the Senators will have at least two years' experience of the work of the Chamber. Persons holding paid offices directly under the Federal Government are ineligible for election to either the Chamber of Deputies or the Senate. Members of both Houses are elected by secret ballot.

Two ordinary Sessions of Congress are held in each year. The first Session begins on September the 16th and lasts to December the 15th, but its sittings may be prolonged for an additional thirty days if necessary. The second Session is convened on the 1st of April, and terminates on the 31st of May following. The President of the Republic is head of the Executive Government, and the whole power of the State is centred in his hands. He is elected directly by the votes of the citizens, under a secret ballot, for a term of four years, and assumes office on the 1st of December following the date of his election. Originally the President was not eligible for immediate re-election to a second term of office, but in December 1890 an amendment was made in the Constitution for the purpose of allowing General Porfirio Diaz to continue in office indefinitely. This provision remained in force until the present year, when the previous system was restored, and the President was prohibited from offering himself for

re-election for a consecutive term. Failure on the part of the President of the United States and his Secretary of State to take note of this change led to a curious incident in September 1913, when President Woodrow Wilson sent Mr. John Lind to Mexico City to demand from the Provisional President of the Republic, General Victoriano Huerta, a promise that he would not present himself for re-election as President. The reply of the Mexican Government to the demand of the President of the United States was that it was unnecessary to ask General Huerta to give this promise, as he was already prevented by a recent amendment of the Constitution from offering himself for re-election.

There have been several changes with regard to the office of Vice-President. Under the Constitution as originally drafted this office was not recognized; but when President Diaz had been in office for a long period, and began to be advanced in years, he asked that a change should be made in the Constitution, and a Vice-President be appointed to assist him in the work of administration. The office, however, has never commended itself to the Mexican people, and it is probable that it will again be abolished. The President must be a native-born citizen of the Republic, be at least thirty-five years of age, independent of any ecclesiastical order, and be a resident in the country at the time of his election. Just before the election of October 26, 1913, General Felix Diaz, a nephew of the former President, was absent in Europe, but he hurried back to Vera Cruz so as to qualify himself as a candidate, though he did not secure election.

The President is assisted in the discharge of his duties by a Cabinet of seven members, which consists of the Secretaries for Foreign Relations, Justice, Public Instruction, and Fine Arts, Promotion (Fomento), Communications, and Public Works, Finance, and War and Marine. Members of the Cabinet must, like the President, be native-born Mexican

citizens and of sufficient age to qualify them for election to the Chamber of Deputies.

The judicial power is vested in the Supreme Court of Justice and district and other subordinate tribunals. There are fifteen judges in the Supreme Court. These officers are elected by the citizens and hold office for six years. They must, in the judgment of the electors, be "learned in the law," be at least thirty-five years of age, and in the full enjoyment of civil rights. The power of the Federal Courts is thus defined in *Mexico*, a publication issued by the Pan-American Union :—

"In all cases arising in regard to the compliance with and application of federal laws, save when such application affects only private interests, in which case the ordinary courts of the States, Federal District, and Territories shall be competent to assume jurisdiction; in Admiralty cases, in cases to which the Federation is a party, in cases arising between two or more States, in cases arising between a State and one or more citizens of another, in civil or criminal cases arising from treaties concluded with foreign powers, and in cases affecting diplomatic and consular agents.

"The Supreme Court of Justice has original jurisdiction in all cases arising between two States, and in those wherein the Union is a party; it also has power to settle questions arising among the Federal Courts, between these and the State Courts, or between the courts of two States. The Supreme Court is the final Court of Appeal or of last resort in all cases here mentioned. The jurisdiction of the Federal courts extends also to all cases growing out of (1) laws or acts of any authority infringing on individual rights; (2) laws or acts of the Federal authority violating or limiting the sovereignty of the States; (3) laws or acts of the latter encroaching on the Federal authority."

The Government of the States, as provided by the Federal

Constitution, is " Republican, Representative, and Popular," and is organized on the same lines as those of the Central Government. In the majority of the States the Legislature consists of a single chamber called a Congress, whose members are elected directly by the citizens for a term of two years as in the Federal Congress. The head of the State Executive is known as the Governor, who is nominally elected by the popular vote of the inhabitants of the State, but in practice he is usually appointed directly by the President of the Republic. He is supposed to serve for a term of four years, but, until very recently at all events, many Governors have remained in power for a long term of years. The late General Bernardo Reyes, who was killed in the revolt of February 1913, was Governor of Nuevo Leon for a period of twenty-five years.

The judicial system in the States is similar to that of the federal system, and consists of a Supreme Court of Justice, with inferior judges and magistrates in the various localities. There is a power of appeal from the State Courts to the Supreme Court of the Republic in Mexico City, and this is frequently availed of, as the administration of justice under the system of elected judges sometimes leaves ground for dissatisfaction on the part of litigants.

Each State is divided into a number of districts, which are under the immediate control of an officer known as the Jefe Politico. This official exercises enormous power, and therefore the Supreme Government takes a close interest in his selection. It is not too much to say that in a majority of cases his appointment is inspired, if not directly brought about, by the intervention of the President of the Republic. In the more remote parts of the country he is in the eyes of the average uneducated Mexican citizen the Government itself, and exercises a very important and immediate influence upon their daily lives. The districts administered by the Jefes Politico are divided into minor divisions known as partidoes and municipalidades,

corresponding roughly to the county townships and town councils in the United States of America. In criminal cases, where a suspected person has escaped across the border into an adjoining State, the local authority there is supposed to deliver the alleged criminal without delay to the authorities of the State where the crime was committed. In actual practice, especially if the person charged is possessed of wealth, innumerable obstacles are placed in the way of his local extradition, and the administration of justice is often long delayed or even entirely suspended.

The States in the Federal Union are prohibited by the Constitution from concluding any alliance, treaty, or league with another State or foreign powers, except the league which may be formed between frontier States for offensive or defensive warfare against savages. They cannot issue letters of marque or reprisal, and they have no power to coin money, issue paper money, stamps, or stamped paper; tax the transit of persons or goods crossing their territories; prohibit or tax, either directly or indirectly, the entrance or exit to or from their territories of national or foreign merchandise; obstruct the circulation or consumption of national or foreign goods by means of imports or taxes; nor can they, without the consent of Congress, establish tonnage or any other port dues, nor impose burdens or duties upon imports or exports; maintain at any time a standing army or ships of war; make war by themselves on any foreign power save in cases of invasion or danger so imminent as to admit of no delay, in which case they must immediately report to the President of the Republic.[1]

The Federal Government alone has power to impose custom duties or taxes on foreign imports or on merchandise in transit through the national territory, but it has no authority with regard to taxation imposed for local purposes in the different States.

[1] See Constitution in Appendix to this volume.

Mexico possesses a standing Army which, in ordinary times, amounts to about 30,000 men. In 1910 the military establishment of Mexico consisted of 7 generals of division, 45 generals of brigade, 58 brigadier generals, 753 commanding officers and 2355 other officers, and about 27,000 private soldiers. The Navy has a personnel of 1163 officers and men. Since 1910 there has been a considerable increase in the numbers of the Army. This was begun under President Madero, but the largest additions have been made by President Huerta since the revolution of February 1913. In order to cope with the subsequent revolution which broke out in various parts of the Republic, the establishment was raised to 85,000 men, and a subsequent decree increased this to 150,000 men, with a proportionate amount of artillery and other arms. The Department of War and Marine has charge of all military affairs, and its representative in the Cabinet is the Secretary. For military purposes the Republic is divided into ten zones. These military zones, with their headquarters, are the following :—

Zone.	*Headquarters.*
First	Torin, Sonora
Second	Chihuahua, Chihuahua
Third	Monterrey, Nuevo Leon
Fourth	Guadalajara, Jalisco
Fifth	San Luis Potosi, San Luis Potosi
Sixth	Leon, Guanajuato
Seventh	Puebla, Puebla
Eighth	Oaxaca, Oaxaca
Ninth	Juchitan, Oaxaca
Tenth	Santa Cruz de Bravo, Territory of Quintana Roo

Special military commanderies are established at Mexico City, Vera Cruz, and Acapulco, in the State of Guerrero. There are factories for the manufacture of war material, and also artillery workshops and powder factories, most of which are situated in the Federal District. The national arsenal is at the

Ciduadela in Mexico City. Officers are trained in Military Colleges at Chapultepec and the "Academy of Aspirantes," situated near Tlalpam. There is a Naval Academy at Vera Cruz, a College of Military Surgery, a Veterinary College and a College of Military Bugle-Calls, and in addition to these there are a number of schools at the various barracks for the instruction of the soldiers in general knowledge. The Military Academy at Chapultepec is regarded as an excellent establishment of its kind, and has on an average about three hundred young officers in attendance. This number has been added to considerably since the promulgation of decrees by General Huerta increasing the establishment of the Army.

The course of studies for officers of the infantry, cavalry, and artillery is three years, but officers passing through the Staff Course, the School of Technical Artillery, and the Corps of Engineers remain seven years under instruction. The course of instruction at the Escucla Militar de Aspirantes was created by virtue of a law promulgated in December 1904, and has for its special object the supply of properly qualified subaltern officers for the infantry, cavalry, and artillery. The courses are short, and are mainly devoted to practical subjects.

The Navy consists of only a few small vessels, chiefly maintained for the purpose of instruction or for coastguard services. These vessels (10 in number) were mostly built in England.

A fairly efficient police force is maintained in the cities and towns, and in addition there are rural guards (rurales), a mounted force armed with rifles, revolvers, and swords, directly under the control of the Federal Government. This singular body, which has always been characterized by a staunch loyalty to the *de facto* Government of the Republic for the time being, was originally instituted by President Diaz, and was recruited almost entirely from the class which

in former times took to brigandage as a matter of course. After their incorporation these one-time robbers became faithful guardians of life and property, and to them is to be mainly attributed the safety which became the established order of things in Mexico during the Diaz regime.

In theory the Army is recruited by voluntary enlistment; in actual practice the method employed (this refers to events up to May 1, 1913) is a somewhat unpleasant variation of our old press-gang, formerly employed for obtaining men for the Navy in England. Occasionally a few misguided people did enlist for much the same reasons as those which send up recruiting for the British Army during periods of trade depression. In other words, lack of means of subsistence forced men into the Army. But the main sources from which the ranks are filled are the jails and captured rebels and highwaymen. Persons convicted on any charge are apt to find themselves enrolled as soldiers. The poor peon, or workman, who lies down in the gutter to sleep off the effects of a few gallons of pulque, often finds himself in uniform and carrying a rifle when he comes to his senses. One of the pleasant features of a thorough debauch on pulque is that the debauchee does not always become rational when he becomes sober, and a man, according to current report, may be drilling in the ranks for a few days before he awakes to the fact that he is not pursuing his ordinary avocations. A thief or homicide sentenced to a term of imprisonment is usually glad to accept the chance of serving as a soldier. Indeed, upon occasion something like a general jail delivery takes place, and the contents of the prisons are poured wholesale into the ranks of the Army. The average Mexican prisoner as a rule evinces but little reluctance to shoulder a rifle, inasmuch as the vocation of a soldier, in these rebellious and troubled times in Mexico, affords considerable opportunity for the exercise of his normal predatory instincts.

After all, English people cannot afford to find much fault with the system. When the Duke of Wellington was fighting the legions of Napoleon in the Peninsula a considerable number of his troops was obtained by the same summary method of converting able-bodied prisoners into soldiers. The Iron Duke, as his dispatches show, was sometimes prone to give free expression in Army Orders to his opinion of the men thus placed under his command.

The second method of recruiting, that of transferring captured rebels or robbers to the loyal battalion, is one that works both ways, and, generally speaking, provides both the Government troops and revolutionists with their best fighting men. The ordinary practice when a skirmish takes place and prisoners are captured is, if they are not shot out of hand to save trouble, to give them the option of serving in the ranks of the victors. Thus a man may be a rebel to-day and a loyal soldier of the Government to-morrow, or vice versa, according to the fortunes of war.

In this strange land men change sides in the most casual and light-hearted fashion. The great bulk of the population, that is, the Indians and " Mestizos," or people of mixed race, are illiterate and ignorant to a degree. They have no idea of the real meaning of representative government, or of the principles upon which it is based. They are content to accept the rule of any man, or any group of men, provided there is sufficient force displayed and the Executive is not too sensitive in the matter of executions. Prompt and adequate hanging or shooting, without any elaborate preliminary inquiries as to its justice or otherwise, is the method of government which most appeals to the heart of the average Mexican ; and much of General Porfirio Diaz's success as President was due to his entire readiness to govern the country in accordance with the accepted ideas of the majority.

The people have little or no conception of the machinery

of government, and the Jefe Politico (district magistrate) is to them the supreme ruler. In the rural districts, if he fails to maintain order and has to fly for safety, probably the bulk of the inhabitants believe they have subverted the whole scheme of things and can rule for themselves. Where they have some ideas beyond this, the bulk of the inhabitants of the country localities and in the smaller villages, regard the country as the absolute property of the Government of the day, which graciously permits them to live in it, but its welfare or its doings is no concern of theirs so long as they are able to obtain a living.

It is really difficult for Europeans to understand the attitude of the majority of the people outside the big towns towards their own country, but once that is grasped it is easy to realize the difficulty of raising troops for the maintenance of order. Nor is the Army, such as it is, properly organized and trained. There is practically no system of supply or transport, and the Medical Services are almost non-existent. The present Provisional President, General Huerta, is a soldier of some accomplishments, and under his direction efforts are now being made to remedy this state of affairs. The recruits, coming in under the promise of better pay, are being drilled with energy, and are taught how to use their arms, so that better results may be expected in the future; but no real attempt is being made to organize a Commissariat Department. The soldiers are scattered over the Republic in detachments varying from one hundred to perhaps a couple of thousand men. They practically live on the country, purchasing food for themselves, or stealing it when it can be obtained by that method. If necessary, they are capable of subsisting on cactus and wild fruits, when maize-flour and beans, their staple food, become unprocurable.

The troops are always accompanied by a swarm of Indian or Mestizo women, who are very active foragers, and who cook

the soldiers' food, and generally look after their comfort and welfare. On the march these women help to carry the soldiers' burdens and step along stolidly, loaded with a bag of Indian corn or beans and the scanty cooking utensils for the preparation of the next meal.

These things can be seen for himself by anyone who moves about the rural districts of Mexico, and that is why the conviction is forced upon the observer that one of the first requirements of the Government is to organize a real Army, such as the President, as a practical soldier, is said to have in view. That once obtained, the settlement of the present disorder should be a matter of only a few months; and General Huerta, if conditions are favourable, will probably succeed in accomplishing it. At all events, in the opinion of foreigners resident in the country, the Government he originally established was the strongest and most competent which the country can produce. Its members had considerable experience of affairs, and their continuance in power, granted they could obtain the necessary requirements for the suppression of the revolution, offered the best guarantee for the future well-being and peace of the Republic. Unfortunately, General Huerta quarrelled with most of the members of his first Cabinet, and they have been replaced by men of inferior character and capacity, a circumstance which probably goes far to explain the decline in the authority of the Central Government and the confusion and want of method that has become apparent in the administration of Mexican affairs.

CHAPTER V

CHARACTERISTICS

Ethnology, tribes and languages—Mexican characteristics—Religion—Marriage laws—Habits and customs—Pulque

MEXICO is inhabited by the largest and most homogeneous race to be found in any of the Latin-American republics. The bulk of the population is descended from the original stock, which ethnologists now distinguish by the name of "Amerindian," a title derived from a combination of the two words "American Indian." Some of the many tribes from whose amalgamation the Mexican people have been derived had anciently attained to a very high civilization. The ruins of the gigantic buildings which were erected by them still excite the wonder of the visitor. Others again were practically savages, and their descendants to this day show little advance. The Seri Indians, in the State of Sonora, for instance, are as ignorant and rude and untutored as the inhabitants of Tierra del Fuego. The races which reached the highest point of civilization were the Nahautal and Maya speaking tribes of the Valley of Mexico and Yucatan. The stock from which the Mexican people is descended is undoubtedly the same as that of the whole of the aboriginal inhabitants of the American continent, and it is now generally accepted that they were of Asiatic origin. But at what period the migrations from Asia took place there is no means of ascertaining. At the present time there is in Mexico a much larger Indian population than appears ever to

have existed in the great extent of country now included in the United States. In the northern portion of the North American continent the Indians always remained hunters and fishers, but in the territory now known as Mexico, mainly owing to the absence of the vast herds of buffalo and the lack of sufficient lakes and rivers well stocked with fish which provided sustenance for the tribes in the northern districts, the Mexicans were obliged to devote their attention to agriculture. The measure of artificial existence thus introduced into the daily lives of the people, and the accompanying struggle for existence, were probably the main causes which led to the higher civilization that developed on the Mexican plateau. Although flesh of various kinds, both of beasts and birds and fish, enter into the dietary of the people, their food, in ancient as in modern times, consisted largely of vegetable products. It was undoubtedly in Mexico that maize, the most economical grain in the world, first originated. The Mexican soil is congenial to the production of a great variety of cereals and leguminous vegetables, and is also favourable to the growth of the banana and other valuable fruits. The inhabitants appear very early to have discovered the value of irrigation in growing crops, and although there were no ploughs, and agricultural tools were of the most primitive kind, the records of the Spanish conquerors show that at the time of the Conquest enormous and very varied crops were raised by the people. Cotton was cultivated by them from remote times, and was used in the manufacture of clothing for the people. They appear to have possessed no domestic animals, or beasts of burden of any kind, and the whole of such merchandise traffic as was carried on was carried on the backs of the people. This habit still prevails, and to the present day everywhere throughout the Republic the natives can be seen carrying enormous burdens on their backs. Even in the elevated regions traversed by the so-called national road between Mexico City and

Toluca, which crosses the mountains at a height of over 12,000 feet above sea-level, hundreds of "cargadores" may be seen every day passing between the two cities carrying huge loads of pottery, mats, and the produce of other cottage industries which are still carried on in the country.

The ancient Mexicans, having no domestic animals from which leather could be obtained, wore sandals made of plaited vegetable-fibre, and exactly similar foot-gear is still in use. Their clothes were made of cotton and bark cloth, and fabrics made of henequen-fibre. Among the wealthier inhabitants there was much barbaric splendour of dress, and they decked themselves with jewellery, feather cloaks, and embroidery. Decorative garments of this kind have now disappeared, but otherwise the Mexican Indians live and dress very much as their forefathers did.

The ancient inhabitants attained to considerable expertness in certain directions. Some of the jewellery found by the early Spaniards was of very skilled and beautiful workmanship, and the Mexican lapidaries could chip, saw, bore, and polish the hardest stones and gems, and were acquainted with inlaying. They were expert stonemasons, and used the pick, the bushing hammer, and abrader. They were acquainted with the principles of the lever and the wedge, and knew how to burn lime and prepare mortar. All their tools were of stone, but cutting implements, both in the arts and in warfare, were made of obsidian, a kind of volcanic glass, of which there are enormous deposits in the country, though occasionally the warriors carried spears tipped with copper. Despite the primitive character of the tools employed, they managed to produce works of astonishing excellence in wood, shell, gold, silver, and copper.

The art of making pottery appears to have been discovered at a very early period, and was brought to great perfection. Several localities are still famous for their ceramics, notably

Guadalajara, Guanajuato, and Zacatecas. Some beautiful specimens of pottery have been unearthed in the vicinity of the ancient ruins and pyramids, especially at St. Juan Testehuacan and Mitla. One of the finest pieces ever discovered was dug up a few years ago in a garden in the city of Tepic, together with several fine turquoises and twenty-six small bells made of solid gold. This ornament was designed to represent a turkey, and forms a jar about six and a half inches in height. " It is excellently made of fine clay, slate-coloured, thin, and of such remarkable resistance, that the man who dug it up brought his pick down on it with full force, but made only a hole at the point of contact. The head and neck of the bird, which are hollow, were evidently made separately and put on after the body was finished. The brilliant surface of the jar, resembling a glaze, is a light olive brown running into a slate, mottled in places with spots of a brick-red colour. The head and neck of the turkey-handle are painted a bright red, and the wattles, all clearly indicated, are each ornamented with a thin little leaf of gold. The same bright red outlines a whitish band around the neck of the jar, as well as the turkey's feet and upper part of the wings on the body of the vessel. This band, as well as the middle part of the wings, the legs, and the feet, were once covered with thin gold-foil; on the middle part of the wings remains of a cross band of gold leaves may still be seen. There are indications that the upper part of the wings was painted greenish blue. The lower part of the wings as well as the tail are represented by fluting. Ornamentations of gold-foil have also been found on ancient beads and potsherds unearthed in the Tarasco country. The bird which the jar represents is rendered so well that even the species of the turkey is unmistakable. The red, wart-like wattles, as well as the erectile process on the head, are those of the Yucatan, or ocellated turkey (*Meleagris ocellata*). The elegant ribbon of golden bronze across the

middle of the wing is as conspicuous in the original as in the jar. The turquoise green-blue that once represented the wings, as well as the profusion of the gold and the high polish of the jar, combine to give an impression of the iridescent gold and green colours of the brilliant turkey itself. The splendid shape and fine workmanship of this jar make it one of the most remarkable specimens of ancient American ceramics. Not many pieces of such ware are to be seen in the museums of the world, and none comparable with this piece. There is reason to believe that an ancient factory of this kind of ware once existed in Guatemala, or southernmost Mexico, but the locality of it has never been discovered." [1]

Jade ornaments in great variety have been found in Mexico. This material was prized more highly by the Aztecs than any other of the precious stones with which they were acquainted. The forms into which it was carved and other characteristics indicate with considerable certainty that it was derived from Chinese sources at a very remote period. Its presence and the extraordinary value set upon it by the ancient Mexicans still puzzle ethnologists, especially as jade is not found in Mexico, and the source from which it was derived remains a mystery.

The Mexicans developed a remarkable system of chronology, many features of which appear to have been borrowed from Asiatic sources. There does not appear to have been any system of measuring the length of the day, and the passage of time was measured, amongst the more primitive races, by the period required for the fading of leaves set up on the path, or the width of the angle traversed by a shadow. The calendar of the Aztecs, Zapotecans, and the Mayas, by which the length of the year was measured, was wonderfully exact. The ancient Mexican year consisted of three hundred and sixty-

[1] See Carl Lumhotz's *Unknown Mexico* for further information on this subject.

five days, divided into eighteen months of twenty days each, with five additional intercalary days. Each day of the month had a proper name and graphic symbol, and the interpretation of these symbols has taxed the ingenuity of archæologists to the present day. Timber was used to a large extent in their buildings. The trees to provide this were cut down with stone axes, and the wood dressed with the same tools. Beams and timbers used in the ancient structures show traces in many places of elaborate carving. The people had a considerable knowledge of the art of dyeing, and some of their fabrics showed very beautiful colouring. Though tailoring in the modern sense was unknown, and garments were made out of a single piece, the clothing of the well-to-do classes displayed, according to the records of the Spanish conquerors, a considerable amount of elegance.

Some of the higher tribes on the plateau and in Yucatan developed a remarkable system of hieroglyphic writing, and though they had no system of printing, or books, as we understand them, they kept elaborate records, not only of the ordinary events in their history, but also of law court and other similar proceedings. A few of the picture-books, in which these records were made, are still in existence, but the knowledge of how to interpret them has been lost. Vast numbers of these books were destroyed by the Spaniards, and only a few scattered manuscripts now remain, mostly in the archives of Spain. The social organization of the aborigines of Mexico furnishes a very interesting field of research. Amongst the rural tribes what is known as " Mother Rule " prevailed, and descent was traced through the female line, as in certain parts of Asia and among some African tribes. In the great Aztec Confederacy " Father-Right " prevailed, and descent was through the male line. Various officers were elected among the Aztecs, and a council of delegates from the various tribes in the Confederacy was charged

with the administration of the affairs of state. The Aztecs maintained a well organized army, by means of which they extended their rule over practically the whole of the central plateau, and their dominion at several points extended down to the coast. The weapons were bows and arrows, darts, throwing sticks, javelins and spears, clubs and slings. Their most effective weapon, however, was a murderous club, studded on either side with blades of volcanic glass. They used shields and heavily padded cotton tunics for the protection of their bodies, and in recent times they are said to have adopted the use of wooden helmets for the protection of the head.

Public fêtes and games were commonly practised, but there are no indications that the drama ever developed in Mexico. They practised vocal singing in unison, and the musical instruments consisted of flageolets and flutes made of wood, bone, and pottery. Drums were a favourite instrument, and were used in connexion with the bloody rites of the terrible Aztec religion, in which human sacrifice was carried on to an extent unknown in any other race. It is said that as many as twenty thousand human victims were offered yearly in Mexico City alone, though there is some reason to believe that this is an exaggeration of the Spanish conquerors. The enormous ruins at Mitla, Uxmal in Yucatan, and other places showed that the ancient Mexicans had attained to a very considerable knowledge of architecture. Buildings were constructed of a variety of materials in which sun-dried bricks were largely used, but the temples and royal palaces and similar buildings were built of dressed stone. Sufficient of these still remain to show the extent to which the art of architecture had developed.

Most people who have never visited Mexico entertain the idea that the population of the country is composed of a mixed Spanish-Indian race in which the Iberian element largely predominates. This view is quite mistaken. There is, of

course, a large number of hybrids, the so-called " Mestizos," but they form a comparatively small percentage of the population. There is perhaps a couple of millions or more of people of mixed descent, and probably another million, or thereabouts, of persons of pure European descent in the Republic, but the remainder, amounting to probably thirteen millions, are practically pure-blooded Indians. Many of these, especially among the Yaquis and the Seris in Sonora, are in almost as primitive condition as when Cortes landed in Mexico. There are one hundred and thirty-three tribes of Indians recognized as still quite distinct. They are divided by ethnologists into sixteen language groups, but fifty-three separate languages or widely differing dialects are still spoken in the Republic. The races which predominated at the time of the Conquest, and which then constituted the great Aztec Confederacy, have sadly declined since the Spanish Conquest, and the native Mexican has become, broadly speaking, a mere " hewer of wood and drawer of water " for people of foreign descent.

Although Mexico is nominally a Republic, in which every citizen has equal rights, the Indians, taken as a whole, have little or no act or part in the government of their country. Political control is entirely in the hands of the descendants of the Spanish settlers in Mexico, and the wealthier and better educated among the comparatively small number of the mixed race which are sprung from their unions with the natives. Two of the greatest men in Mexican history, Benito Juarez and Porfirio Diaz, had a large infusion of Mexican blood in their veins. The former was almost, if not quite, a pure-blooded Indian. It is somewhat noteworthy that these two men, like nearly every other Indian who has distinguished himself, belonged to the Mixtec tribe in Oaxaca. Juarez belonged to this tribe, and Porfirio Diaz's grandmother was a Mixtec Indian.

Whether it is due to the long centuries of Spanish rule and

the subjection to which the natives were reduced under that system, or whether it arises from their Indian blood, it is almost universally conceded by foreigners resident in Mexico that it is almost hopeless to attempt to stimulate the ambition of the Indians or to raise them above the abject level at which they exist. Increased pay seems only to have the effect of making the Indians work a less number of days in the week, and they appear to be without any ambition or desire to better their condition. One instance will suffice to illustrate this point. On a large banana plantation in the State of Oaxaca the average wages paid to the peons was 75 centavos per day, the equivalent of about 1s. 6d. in English money. The men were quite content with this rate of wages, which enabled them, in a tropical country, to keep their families in a fair degree of comfort. The managers of the plantation, anxious to improve the conditions of the Indians, and at the same time to increase the amount of work which could be accomplished in a given time, offered their employés increased wages provided that they worked overtime in order that the bananas which were ripe might be marketed before they had spoiled. The Indians readily accepted the offer, but as soon as the weekly 9s. had been earned, sometimes in less than four days, they immediately knocked off work, and no inducement could persuade them to resume until the money was exhausted and it became necessary to earn more.

Yet, within his limits and under white supervision, the Mexican is a useful workman. Routine duties he performs satisfactorily, but if his task requires sustained attention or thoughtful foresight, he is apt to fail. In the cities he makes a good factory hand under careful training; gardening he takes to naturally, and as a mason or bricklayer under the direction of a skilled foreman he is excellent. He makes a competent motor-man or train-conductor, because in these occupations the operations he has to perform are mainly

mechanical and are limited in number. But put him in charge on the footplate of a locomotive where a higher degree of skill and watchfulness is required, and where he is left to his own resources, and disaster is apt to ensue. The average Mexican almost wholly lacks a sense of responsibility, and he is equally innocent of what is termed "conscience." A Mexican will faithfully guard his master's property so long as he knows himself to be under observation. If he feels that that is removed, he will either neglect his charge or appropriate to his own use without a qualm, or without any sense of wrongdoing, the property of his master.

For these reasons the percentage of what may be termed management expenses, apart from the mere cost of labour, as shown by the wages bill, is disproportionately high as compared with the similar expenses in Europe or the United States. Labour, as measured by wages paid to the individual workman, is cheap in Mexico, but large employers state that when the total cost is compared with the output, there is very little difference between the price of labour here and other parts of the world. This generalization as to cost does not apply on the great haciendas, or country estates of Mexico. There, labour is employed under peculiar conditions, which in many cases is hardly to be distinguished from actual slavery. These haciendas represent the estates originally granted to Spaniards centuries ago. As a rule they are of enormous extent, and it is the pride of their owners to hand them on undiminished to their successors.

Some are remote from the usual highways of commerce, and are still conducted on feudal, or even patriarchal methods. Whether devoted to the growth of the pulque cactus on the high plateau, or sugar or coffee in the "tierra caliente," they are, as a rule, absolutely self-contained. The hacendado (proprietor) supplies his peons with everything they eat or drink or wear, and the cost is charged against the peon's wages;

for there is as yet no "Truck Act" in the Republic. The peons are generally born and reared on the estate. When they arrive at maturity, often before it, the first thing they do is to borrow from the hacendado a sum of money to enable them to get married.

From that hour the labourer ceases to be a free man. Marriage is an expensive thing for the peon. The State will marry him for nothing, but all his life he has had it dinned into his ears that a civil marriage is an abomination; that the ecclesiastical wedding in the hacienda chapel by the priest is the only binding tie, and that ceremony costs a good fat fee. So the poor peon, if he troubles to go through the form of marriage at all, borrows the money from his employer, who gladly advances it, and also the fifty or sixty pesos necessary to fit up his humble dwelling. Never again in his life will the peon be free of debt, because it is a sheer impossibility for him to save any money. Indeed, he rarely or never sees any money. He toils from year's end to year's end; the hacendado, or his manager, supplying food and clothes as the peon requires them for himself and his wife and children; and every year he gets deeper into the mire. So long as he owes a single peso he is tied body and soul to the estate on which he was born. Imprisonment for debt is supposed to be contrary to the laws of the Republic, but a peon in debt, if he runs away, will be arrested and handed back to his master, and as once in debt always in debt is the almost invariable rule, a large percentage of the peons pass their lives in a condition of virtual slavery.

If, in his despair, he commits a crime and is imprisoned, he is in even deeper slavery than before, because the system of contract labour prevails in Mexico, and criminals are hired out to contractors, who usually see to it that they make a profit on the transaction. Little wonder, then, that the late Francisco Madero's promise to reform the laws relating to "peon-

PEASANT TYPES

age," and to give every peon land and a mule of his own, brought the poor, discontented wretches flocking to his standard, and enabled him to overthrow Porfirio Diaz. The bitter disappointment that followed the failure of Madero to fulfil any of his promises has had much to do with the disorder that has marked these last two years. Most of the so-called rebels are simple peons who have been driven, partly by despair and partly by natural inclination, to adopt the life of bandits and outlaws. Political objects they have none; their aims are entirely personal, and are prompted largely by the desire to escape from a mode of life that had grown intolerable.

But let not too much sympathy be wasted on the peon. So long as he is kept in hand he is fairly quiet and tractable, but when he takes to the road and becomes his own master he is turbulent, savage, and brutal, displaying all the cruelty, lust, and disregard of human life and suffering that is characteristic of the American Indian. The fiendish savagery of this class has been manifested again and again during the past three years by endless incidents, like the treatment of the women at the San Vicente mine in Guerrero and at the wreck of the train to Cuernavaca, last May, when the injured were murdered and the women passengers ravished and then thrown back into the burning train that had been deliberately set on fire.

Apart from his patience and tractableness under restraint and his brutal savagery when he breaks loose, the psychology of the average Mexican is a very interesting study. Whether pure Indian or "Mestizo," he is deeply imbued with what may be described as the "Mañana" spirit. He will not do to-day what can be put off till to-morrow, or at all unless necessity compels it. With him Mañana does not mean "to-morrow," it means "not now," or never if he can avoid it. He seems incapable of entertaining more than one idea, and is utterly lacking in the capacity to compare ideas and form a judgment

for himself. He is easily influenced and led, but he follows individuals, not principles. He will be carried away with enthusiasm while listening to one set of opinions. An hour later, if some plausible personality commends a set diametrically the opposite, he will accept them with equal readiness and whole-heartedness.

Being naturally indolent, he would rather be governed and taken care of than govern; but he must be—he likes to be—ruled with a firm, even a harsh, hand, provided it is just and is applied with tact and understanding. Porfirio Diaz thoroughly understood his countrymen in these respects, and hence his rule was successful until his powers and methods were enfeebled by age. His successor, President Madero, made the mistake of thinking that the Mexican was ready for democratic government. When he discovered his error he attempted to return to Diaz methods without the Diaz strength and knowledge, and failed miserably.

The patriotism of the average Mexican is almost non-existent. He is supremely selfish, and if his own interests and personal concerns prosper he is indifferent to the fate of his neighbour or of his country. His sense of justice is blunted. As a writer with a long experience of Mexico puts it, the aim of the average Mexican in all controversial matters, either with his own countrymen or with foreigners, is not justice or fair play, but an " arreglo," an arrangement, in which he will get the better of his opponent somehow or other.

As a soldier, he is uncertain and unreliable. When cornered he will often fight desperately, but in the open he prefers to engage his adversary at long range, and will spend days in much wasteful expenditure of ammunition unless he believes himself superior to the enemy in numbers, equipment, and other advantages. It is because of this characteristic that one reads in the Mexican papers of " desperate " battles, lasting for days, between the Federal troops and the rebels, where the toll of

killed and wounded is in ludicrous disproportion to the numbers engaged and the duration of the conflict. " Battles " have been reported where hostile bands have suddenly encountered each other in the mountains at 200 or 300 yards range. Both sides retreated precipitously until they were 1500 yards or so apart, and then, snugly ensconced behind rocks, began the fight in true Mexican style. The slaughter in these " battles " only begins when, by some accident, prisoners have been captured and disarmed. Then the victors show a complete disregard for life—that of the prisoners.

Sufficient has been said to indicate that the average Mexicans, who form the bulk of the population, are as yet hardly fitted for representative government, and that the only rule suited to their peculiar temperament and state of political development is a benevolent despotism, such as the country had under General Porfirio Diaz. The long and successful administration of that doughty old warrior was very largely due to the fact that he did not overdo the " benevolence." Even the urban middle and upper classes, with whom political control largely resides, are not always in a position to exercise the franchise effectively, even under the " Sufragio efectivo y libre " promised by the Madero family.

The famous, or rather infamous, incident of the Zacatecas election returns is a case in point. Under the Constitution a committee of the Chamber of Deputies examines the returns and reports what candidates have been duly elected. In the case of Zacatecas, the committee reported that certain gentlemen had been duly returned as the representatives of that constituency. When the Chamber asked to see the returns it turned out that the official packet from Zacatecas had never even been opened! That, however, was a mere detail. The candidates reported by the committee as duly elected were all good " Maderistas," and what more was required?

It is abundantly plain to anyone who chooses to study

conditions on the spot that the Mexican is still in a primitive stage of development—politically, commercially, and socially. The best hope for the country is that a group of strong, capable men, or even one man, shall be charged with the administration of its affairs, under the forms of the Constitution, as far as these lend themselves to the task, but in reality with a free hand to adopt whatever courses may be necessary to deal with the disturbed and inflamed conditions of the Republic. This method must persist for many a year to come, and it alone offers a reasonable guarantee that the limitless resources and unbounded potential wealth of the country may be developed to the advantage of the people who dwell in a land of matchless climate and opportunity.

The fruit of the old Spaniard's devotion to his religion is admirably shown by the remarkable homogeneity of the Mexican people in one respect. Practically the whole population are members of the Roman Catholic Church. It is estimated that at least fourteen millions of Mexicans are Roman Catholics, but many of the Indians, although they and their ancestors have been practising this faith for three hundred years, remain practically pagan in every sense, and, it is said, still worship their ancient gods in secret. Many of the ancient superstitious rites and practices have been grafted on to the purer faith. In some cases it has been found necessary to prohibit ancient customs that the Indians were anxious to continue. Pilgrimages to various shrines, especially to that of Guadalupe, where a miraculous appearance of the Blessed Virgin is said to have occurred shortly after the Spanish Conquest, are prominent features in the lives of the people, and the scenes that occur on these occasions are such as to indicate that the average Mexican Indian has still but a very faint conception of the faith to which he belongs. Many educated Mexicans, particularly amongst those of pure Spanish or slightly mixed descent, have discarded religion altogether,

but it has to be said that the tendency towards materialism is less marked, as a whole, in Mexico than any of the other Latin-American republics, or even in France or Italy among the Latin races in Europe.

The disestablishment of the Church, which was completed by Benito Juarez, the first Indian President of the Republic, although it deprived her of a large portion of her wealth and influence, has been, on the whole, to the benefit of true religion.

Mexicans do not take kindly to industrial or commercial life. The desire most manifested amongst the well-to-do Mexicans is to belong to some of the learned professions; to be a "Doctor." Many of them study law, medicine or engineering, or some of the other learned professions, but as a rule this is regarded merely as a stepping-stone to politics. According to a recent American writer, the middle class youths in the cities and towns seem to have no higher ambition than to obtain some Government clerkship or other similar appointment, whilst the sons of wealthy parents do not seem even to rise as high as this. These latter are said to be "entirely lacking in energy and ambition, and only desire a life of licentiousness and ease."

A good many Mexicans, however, do go into trade, and the ownership of a large store or magazine does not necessarily involve a loss of social standing; but the proprietor of a "tienda" (small shop) is regarded in Mexico much as he is in the older aristocratic countries of Europe. Mexico, socially as well as politically, is a Republic only in name. Wealth and position are very highly regarded and respected, a legacy which has come down no doubt from the time of the Spanish Dominion. The Conservative element in the population is, as a rule, devoutly Roman Catholic, and is very retrograde in its views and opinions. Although this party has long been without much power, it still protests, and is a consistent

opponent of all the privileges and concessions given to foreign capitalists.

Under the autocratic and despotic system of government which has long prevailed in Mexico very little attention was paid to raising the condition of the great mass of the population, which is still sunk in ignorance, and so far as the peons —that is, the labourers on the plantations—are concerned, is without civil rights or political influence. Politics in Mexico are almost entirely personal. The different parties in the State are hardly, if ever, named after any recognized political principle, and where such terms are employed they are mainly used by foreign newspapers. In Mexico itself parties are invariably designated by the name of their leader, and one hears of Felixistas, Maderistas, Carranzistas, Zapatistas, and so on, and personal ambition rather than the welfare of the community seems to be the guiding motive of most of the leading men of the Republic.

The great bulk of the population of Mexico belongs to the peon and labouring class, who manage to scrape out the scantiest existence in a country overflowing with natural wealth. They are on the whole a hardy, patient, and, if reasonably treated, docile people, but they are prone to extremes of passion, and amongst themselves quarrels and homicides are very frequent. The chief source of these disputes, and of the bloodshed that too often accompanies them, is due to the laxity of morals which unfortunately prevails in the country. The marriage tie in Mexico amongst the poorer classes is not regarded as having any special sanctity, and more than half the total births in the Republic are reported to be illegitimate. This arises from a variety of causes, the chief of which is the quarrel that has long subsisted between the Church and the State. Amongst the poorer and more ignorant classes, and especially amongst the Indians in the country districts, the Church still possesses a great influence,

and this influence is used very often to thwart and obstruct the execution and administration of laws relating to the social condition of the people. When the Church was disestablished civil marriages were made legal and binding without the addition of any ecclesiastical ceremony. This was bitterly opposed by the bishops and clergy in Mexico, and, as already stated, they impressed upon their adherents the argument that the civil marriage was no marriage at all. In many places the poor peons were actually told that it was a sin, and that the only marriage that was valid was that solemnized in the church. The average Mexican is not greatly concerned about the moral aspect of the matter, and this attitude on the part of the clergy might not have been attended with any untoward results if it had not been for the fact that the ecclesiastical marriage in Mexico is a very expensive proceeding. Large numbers of the people are unable to bear the cost of it, and as they are taught that the civil marriage is a sin, the result is that no marriage at all takes place in a very large number of cases, and the offspring of such unions are of course illegitimate.

A recent American writer, Mr. Charles Macombe Flandrau, who spent several years on a remote coffee plantation in Mexico, has some very interesting comments to make on this aspect of Mexican life. He says: "Among the lower classes in Mexico free love is not the social experiment it sometimes tries to be in most civilized communities. It is a convention, an institution, and, in the existing condition of affairs, a necessity. Let me explain. The Mexicans are an excessively passionate people, and their passions develop at an early age (I employ the words in a specific sense), not only because nature has so ordered it, but because, owing to the way in which they live—whole families, not to mention animals, in a small one-roomed house—the elemental facts of life are known to them from the time they can see with their eyes

and hear with their ears. For a Mexican child of seven or eight among the lower classes there are no mysteries. Boys of fifteen have had their affairs with older women. Boys of seventeen are usually strongly attracted by some one person whom they would like to marry, and just at this interesting and important crisis the Church furnishes the spectator with one of its disappointing and somewhat gross exhibitions.

"It seems to have been proven that for people in general certain rigid social laws are a comfort and an aid to a higher and steadier standard of life. In communities where such usages obtain, the ordinary person in taking unto himself a wife does so with a feeling of finality. On one's wedding-day but little thought is given, I fancy, to the legal loopholes of escape. It strikes one as strange, as wicked even, that a powerful Church—a Church moreover that regards marriage as a sacrament—should deliberately place insuperable obstacles in the path of persons who, for the time being at least, have every desire to tread the straight and narrow way. This, to its shame, the Church in Mexico does.

"The only legally valid marriage ceremony in Mexico is the civil ceremony, but to a Mexican peon the civil ceremony means nothing whatever. He cannot grasp its significance, and there is nothing in the prosaic, business-like proceeding to touch his heart or stir his imagination. The only ceremony he recognizes is one conducted by a priest in the church. When he is married by a priest he believes himself to be married, which, for moral and spiritual purposes, is just as valuable as if he really were. One would suppose that the Church would recognize this, and encourage unions of more or less stability by making marriages inexpensive and easy. If it had the slightest desire to elevate the lower classes in Mexico from their perfectly bestial attitude towards the marital relation, to inculcate ideas different and finer from those

maintained by their chickens and pigs, it could long since easily have done it. But quite simply it has no such desire. In the morality of the masses it shows no interest. For performing a marriage ceremony it charges much more than poor people can pay without getting into debt. Now and then they get into debt. More often they dispense with the ceremony. On my ranch, for instance, very few of the 'married' people are married.

"Almost every grown man lives with a woman who makes his tortillas and bears him children, and about some of these households there is an air of permanence and content. But with the death of mutual desire there is nothing that tends to turn the scale in favour of permanence; no sense of obligation, no respect for a vague authority higher and better than oneself, no adverse public opinion. Half an hour of ennui, or someone seen for a moment from a new point of view, and all is over. The man goes his way, the woman hers. The children, retaining their father's name, remain as a rule with the mother, and soon there is a new set of combinations. One woman who worked here had three small children, every one with a different surname, the name of its father. While here she kept house with the mayordomo, who, for no reason in particular, had wearied of the wife he had married in church. No one thought it odd that she should have three children by different men, or that she should live with the mayordomo, or that the mayordomo should tire of his wife and live with another. As a matter of fact, there was nothing odd about it. No one was doing wrong; no one was 'flying in the face of public opinion.' She and the three men who had successively deserted her, the mayordomo who found it convenient to form an alliance with her, and his wife, who betook herself to a neighbouring ranch and lived with a boy of sixteen, were all simply living their lives in accordance with the promptings they had never been taught to resist. It is not unusual to

hear a mother, in a moment of irritation, exclaim as she gives her child a slap, 'Hijo de quien sabe quien' (child of who knows whom).

"At an early age, when they first fall in love, they would, I think, always prefer to be married, but where get the ten pesos without which the Church refuses to make them man and wife? . . . The Church, which has always been successful in developing and maintaining prejudices, could have developed, had it wished, the strongest prejudice in favour of matrimony and the permanence of the marriage tie. But it has not done so, and now, even when peons do have the religious ceremony performed, they do not consider it binding. After having gone to so much expense, they are not likely to separate so soon, and that is all. One of the men here has been married three or four times, and on every occasion he has treated himself to a religious ceremony with quite a splendid dance afterwards. As he is a skilled mason who commands good wages, and has no bad habits (except that of getting married every little while), he can afford it. He is a genial sort of creature, and I think he enjoys having weddings, very much as some persons enjoy having dinner parties. Sometimes he deserts his wives, sometimes they desert him. Of course I do not know, but I have an idea that to have been married to him at one time or another carries with it a considerable prestige."

This is a terrible indictment of the attitude of the Church towards the question of marriage in Mexico, but every one who has lived for any time in the country will recognize that, though somewhat picturesque, it is on the whole a very faithful and accurate description of the conditions of life among the poorer classes in Mexico. The educated and better-to-do classes of course have a higher regard for the marriage tie, but it must be admitted that the moral tone of the population is, on the whole, a debased one.

Mr. Flandrau's observations in another part of his interesting book on Mexican life, which is entitled *Viva Mexico*, contain the following statement, which will be endorsed by everyone familiar with the country. "I can only assert," he says, in reference to Mexican history, "that almost every phase of it is embedded in layer upon layer of the rottenest type of ecclesiastical politics, and that the great mass of the people to-day reflects its generations of mental and physical failure. For whatever, from time to time, has happened to be the form of government, the people have never enjoyed any large measure of freedom. Even now [this was written when General Diaz occupied the Presidential chair], with an acute, patriotic, and enlightened President at the head of the nation, Mexico is not a Republic, but a military despotism. In the name of gods and of God, of kings, dictators, popes, generals, emperors, and presidents, the people of Mexico have been treated, one would be inclined to say, like so many head of irresponsible cattle, if cattle as a rule were not treated more solicitously."

The poorer classes in Mexico, particularly in the more remote districts, have neither civil nor legal rights, and the law affords them little or no protection. So far as they are concerned, the law and government begins and ends with the Jefe Politico of the district. It is not unusual for these officials, when it suits their purpose, to announce that a certain law has been passed when no such law is in reality in existence. An interesting example of this kind of administration is recorded in the *Mexican Herald* of February 11, 1908. In one of the mountainous districts in the State of Guanajuato a bridge was being built by a contractor who was a friend of the Jefe Politico. He found some difficulty in procuring the necessary labour, and for a considerable time the work made no progress. At first the Jefe Politico, in his wish to provide labour for his friend the contractor, resorted to the usual method of making

arrests for drunkenness, and compelled the victims to work on the bridge. But this arbitrary process had the result of introducing an unusual self-restraint on the part of the populace. The Jefe Politico then conceived the quaint idea of announcing that a law had been passed forbidding people to appear in the town without trousers. The Indians in the country districts as a rule wear, instead of trousers, a pair of loose cotton drawers, and in virtue of his own law the Jefe Politico arrested every man who appeared in the place wearing garments of this kind. The arrested men were immediately handed over to the contractor, and the work of completing the bridge proceeded rapidly, thanks to this novel "law" of his friend the Jefe Politico. One enterprising individual took advantage of the operation of the "law," and did a very profitable business, until sufficient men had been secured for the bridge building, by establishing a small store outside the town where he hired out trousers to the Indians who were venturing in to attend the market. The *Mexican Herald*, commenting on this incident, said: "The local treasury will soon be full to overflowing from the numerous fines collected from the sons of the mountains who daily endeavour to enter Guanajuato clad in cotton drawers." As a matter of fact, there was no desire to collect fines, even if the peons had been able to pay them. All that was wanted was that the Jefe Politico might be able to procure sufficient labour for his friend the contractor.

Mexico has been greatly hampered in its development by the fact that, unlike the United States and Canada, and the Latin-American republics in South America, it has never been an attractive field for foreign emigrants. The reason why a country so fertile and so rich in natural resources as Mexico has failed to attract emigrants from European countries, which would have raised the standard of life and morals amongst the native population, is due to two causes. The chief of these is undoubtedly the fact that the soil of the Republic is held in

a very few hands. Comment is often made with regard to the land problem in England, and to the fact that 2500 people own more than half the soil of the Kingdom. This is held by some people to be in the nature of a national calamity. Mexico is as large as France, Germany, and Austro-Hungary combined, or about fourteen times as large as England, but the number of landowners there is only a very few hundreds. There is one single landowner, General Terrazas, who holds in his own hands nearly twenty million acres, equal to half the total area of England. This condition of affairs had the result that Mexico had no free land to offer to settlers from the Old World. The experience of the United States, Canada, and the Argentine prove that the great attraction for emigrants is the prospect of securing land of their own. Mexico could hold out no prospect of this kind, and the stream of emigration never set in her direction. The second cause which tended to keep the classes who emigrate away from Mexico was that, being almost entirely a non-manufacturing nation, there was little scope for the employment of labour. The native Mexican is content to work for wages and under conditions which were an effective bar to the introduction of labour from foreign countries. The result has been very unfortunate for the Republic, because it deprived her of that stream of fresh and enterprising blood which has done so much for the development of other nations on the American continent.

The food and housing of the working classes in Mexico is poor and primitive in the extreme. Even in the towns and cities their dwellings are usually insanitary one-roomed structures, in which it is impossible for any degree of comfort or decency to be maintained, while in the rural districts the houses of the peons and labourers are no more than wattle huts, open to every breeze that blows. This, however, is an advantage rather than otherwise in a tropical country, and provides a ventilation that has some effect in mitigating the

consequences of the insanitary conditions under which the people live. The universal diet of the working class consists of tortillas—that is, thin pancakes made from ground Indian corn—supplemented by beans and green pepper. They rarely taste meat, but on this scanty diet they are accustomed to work from dawn to dark.

There is no organization in Mexico for the betterment of labour conditions, yet notwithstanding this, strikes are very frequent, and occasionally very bitter. But they are called in a most indiscriminate and irrational fashion at the will of any leader who for the moment can secure the ear of the working population in a particular district. The only amusements or relaxation open to the people are drunken carousals, often in connexion with Church fiestas, horse-races, and bull-fights. Bull-fighting indeed is the national pastime, and this, together with the excitement furnished by the innumerable lotteries that are carried on, are the main relaxations open to the poorer classes in Mexico. Mexicans, even the very poorest, are inveterate gamblers, and their tendencies in this respect are fostered and encouraged by the lotteries promoted by the Federal Government, the Governments of the individual States, and the Municipalities of cities. The system of splitting up the tickets into numerous shares enables the poorest to take a share, and participation in the drawings can be obtained for as little as 10 centavos, the equivalent of about 2½d. in English money.

No sketch of the Mexican people would be complete without some reference to pulque, the national drink. This liquor is derived mainly from one species of cactus, which forms the dominant feature of vegetation on the central plateau. There are several species of cactus the juice of which is used for the production of intoxicating liquor, but the plant chiefly employed is the maguey (*Agave americana*). This species is familiar in Great Britain under the name of

the " century plant," a title given to it because of its supposed habit of only flowering once in every hundred years. As a matter of fact the plant arrives at maturity, that is the blossoming stage, in its native habitat, about the age of seven to ten years. It then throws up the well-known magnificent shoot of pale yellow flowers, which sometimes rise to a height of 15 or 20 feet. The effort of producing this gigantic bloom exhausts its vitality, and after the flowers set the whole plant withers and dies. Huge tracts, especially in the southern portion of the central plateau, are devoted to the cultivation of the maguey, and enormous fortunes are made by the owners of the plantations. The Mexican Railway between Maltrata and Mexico City passes through mile after mile of fields devoted to the cultivation of this crop. The natives use the plant for a great variety of purposes besides the manufacture of intoxicating drink. Paper, vinegar, molasses, fibre, and even needles, made from the spiny point of the leaves, are obtained from it. In ancient times the hieroglyphic manuscripts of the Aztecs were painted on paper made from the maguey, and it has proved to be not inferior in endurance and quality to that derived from the celebrated Egyptian papyrus. The leaves will sometimes attain a length of 12 or 14 feet. At their best they will sometimes be a foot in breadth and 9 or 10 inches thick. Those who have only seen the plant in temperate climates can form no conception of the splendid proportions it attains under suitable conditions. The lower leaves and roots are sometimes roasted, and from them are distilled two very fiery and intoxicating beverages known as " tequila " and " mescal "; but by far the most important production derived from the plant, both commercially and socially, is the liquor known as pulque, which undoubtedly exercises a very deleterious effect upon people who consume it habitually in large quantities.

The maguey is planted in symmetrical rows at a distance of about 9 feet apart each way. It requires little or no further attention until the flowering stage is reached, usually in about seven years. The plant is then ready for the extraction of the juice for the manufacture of pulque. Great care and long experience are necessary to enable the exact time to be decided upon for this operation. If the collection of the juice is begun too early, the flow is greatly reduced and the quality is not so good, while if delayed too long the plant may die in a few days, and little or no juice be obtained. The peons, as the result of experience and traditional lore handed down from generation to generation, can usually determine to an hour the proper moment for beginning operations. When this is accurately timed, the plant seems to act as if it were providing nourishment for its gigantic flowering stalk. Day after day for two or three months the juice flows freely, the big fleshy leaves gradually shrink as they part with the moisture they have been storing for years, until at last it is dried up and shrivelled, and presents all the appearance of having died a natural death after having produced its flowers and seed.

The process of extracting the juice is very simple. When the proper stage of growth has been reached, which is just before the flower stalk begins to form, the centre of the stem is cut out, and the white core hollowed to a depth of 8 or 10 inches. In this depression the juice gathers very rapidly, and a good plant will yield from ten to fifteen, or even more pints every day until it dies.

The pulque-gatherer is a very picturesque figure. Dressed in his thin cotton garments and huge sombrero, and with a bag made of skin, usually that of the pig, on his back, he goes from plant to plant sucking up the juice through a tube resembling a pipette and squirting it over his shoulder into the bag on his back. When the pigskin is full it is

ARCADE WITH NATIVES, PUEBLA

carried to an ox wagon and there emptied into a cask, and so the process goes on until the cask is filled. The juice, which is known as aguamel (honey-water), is then transferred to the "tinacal" or fermenting rooms at the hacienda. The juice, when freshly drawn, is sweet to the taste, and has a pleasant smell, quite distinct from the offensive odour that characterizes the finished pulque. It is reputed to have some very important medicinal effect, especially in diseases of the kidneys and liver. Recent investigations seem to lend support to this tradition, and a preparation of it has been introduced into Europe under the name of "agmel," for the treatment of Bright's Disease.

This, however, is for the present an unimportant application of the juice of the plant, which is mainly used for the preparation of intoxicants. When it is placed in the fermenting rooms, a quantity of old pulque—or "mother-pulque," as it is called by the peons—that has been kept for some time and allowed to become rank and sour, is mixed with the fresh juice so as to set up the fermentation. Within a very few hours the whole contents of the vat have turned acid, and produce an evil smell that is very characteristic. Pulque is a mucilaginous liquor containing about 6 per cent of alcohol, and holds in suspension large numbers of small white corpuscles, which give it its characteristic milky colour. In appearance pulque resembles absinthe, after the water has been added, more nearly than any other substance. Its taste is something like that of buttermilk which has been kept until it has grown sour, but with this there is a somewhat sugary flavour and a peculiar odour, which must be experienced to be appreciated.

The liquor spoils very quickly, and should be drunk within twenty-four hours of its manufacture. For this reason supplies must be delivered fresh daily to the "pulquerias," where it is sold in the towns. Every morning half a dozen special

trains or more run into Mexico City from the pulque-growing districts, and on fiestas and other occasions as many as six hundred wagon loads will sometimes be delivered in the city. The Mexicans are passionately fond of it, and attribute to it many virtues. The quantity which a peon will drink, if he can afford it, is enormous; and an habitual pulque-drinker will easily consume three or four gallons a day if he can afford the three farthings or so per quart which it costs.

The best pulque is said to be produced in the neighbourhood of Apam in the State of Hidalgo. The pulquerias in which the liquor is sold are as a rule dirty, squalid, and repulsive dens. Like the ancient wine shops in Europe, they have a distinctive sign, but instead of the bush they use a fringe of varied-coloured paper hung above the doorway; and the fronts of the houses are usually painted in raw tones of blue and yellow. The neighbourhood of one of these establishments is as distinctive as that of a fried fish shop in a London slum, but the smell of the sour pulque is infinitely worse than that of the oil in which the Londoner's fish is prepared. The interior is bare and repellent. A long counter is ranged against one wall, and behind it are the rows of barrels, usually painted in vivid colour, in which the liquor is stored. It is served in tall narrow glasses resembling an exaggerated flower vase, or a "beer schooner" familiar in American public-houses. The pulquerias are invariably thronged by sodden and blear-eyed habitués, male and female, and they are the centres of a great part of the crimes of violence that are committed in Mexico.

The effects produced by pulque are very peculiar. In the early stages of intoxication it seems to produce a tendency to violent and irresponsible action, in which condition the drunkard is very apt to use his knife or machete on the slightest provocation. This stage soon passes, and a comatose, stupid state supervenes, in which the actions of the drunken man or woman appear to be almost entirely automatic, as if the higher

centres of the brain were completely paralysed. The effects of a thorough carouse sometimes last for a considerable time, and an habitual pulque-drinker degenerates into a condition in which the superior mental faculties appear to be completely lost. Fresh pulque drunk at Apam, the chief centre of its production, may possess the virtues ascribed to it by Mexicans, and by some European physicians, but the appearance and odour of the pulque drunk in the cities and towns, and the filth of the dens in which it is sold, are sufficient to make an ordinary person rather dubious about testing its qualities. Mexican opinion of the national drink is expressed in the following doggerel lines:—

Sabe que ne pulque—
Licor divino ?
Lo beben los angeles
En vez de vino !

Which may be translated:—

Know you not pulque ?—
'Tis a liquor divine,
And is drunk by the angels
In preference to wine !

The discovery of pulque must have been made at a very remote period. When the Spanish conquerors arrived in Mexico it was then the national beverage and had been in use for so long that its origin was lost in the mists of tradition. The Aztecs are said to have derived a knowledge of it from the Toltecs, and it was known to them under the name of "neutli." The present name of "pulque" is of Chilian origin, and was applied to it in some way by the Spaniards. According to tradition, the virtues of the liquor were discovered in this way:—During the reign of Tepancaltzin, the eighth king of the Toltecs, a kinsman of the king named Papantzin observed a field mouse gnawing a hole in the central bulb of a growing maguey. Taking the curdled liquid which issued therefrom, Papantzin sent it to the monarch, employing as messenger his

lovely daughter Xochitl. The impressionable king forcibly detained the girl, and placed her in his harem. From their union was born a child called Meconetzin, literally "child of the maguey." The downfall of the Toltecs dated from that epoch. In their thirst for the juice of the maguey they neglected the arts, in the exercise of which they were noteworthy, agriculture, and the warlike practices that had enabled them to obtain a footing amongst the barbarous tribes which surrounded them. Their virility vanished, and they were driven out of the Valley of Mexico by the first strong tribe (the Chichimecs, about the year 1100) that appeared to dispute their sway. In commemoration of the legend many of the pulquerias where the drink is now sold call their places La Hermosa Xochitl, meaning "the beautiful flower." Convinced of the prejudicial effects of the drink upon the Indians, and believing that much of the cruelty practised by the Aztecs was traceable to its brutalizing effects, several of the Spanish viceroys strove to stifle the traffic. The first edict against it was launched in May 1635 by the Marques de Mancera. The measure received the sustained support of the Archbishop of Mexico and many other men of note, but the campaign failed in its purpose. The edict against its use, issued on June 8, 1692, by the 29th Spanish Viceroy of Mexico, resulted in a formidable riot. His palace was stoned, and an infuriated mob burnt several public buildings. During the century following many pamphlets were written on the pernicious effects of pulque-drinking, and the archives at the Municipal Palace in Mexico City contain numerous documents which passed between the Viceroys of New Spain, the Spanish King, and the Indian Council treating of the terrible vice and its wide-reaching influence for harm.[1]

There can be no doubt as to the widespread and terrible effects of the consumption of pulque. It has a deteriorating

[1] Terry's *Mexico*.

effect on both the physical and moral qualities of the Mexicans, and its use is attended by effects which have lowered the whole standard of the race. So long as pulque-drinking continues, it is doubtful if the people of Mexico can ever attain to any high stage of development.

CHAPTER VI

MEXICAN POLITICS

Politics—Despotic rulers—The personal element in Mexican politics—Peculiarities of elections—The Revolt of February 1913

THE Constitution of Mexico, a copy of which will be found in an appendix to this volume, is, on paper, one of the most liberal and democratic in the world; but in actual practice the form of government since the establishment of independence has been, whatever its nominal title, almost invariably despotic in character. Supreme power is vested in a Legislature, an Executive supposed to be responsible to it, and a Judiciary. In actual practice the Executive in power for the time being exercises a large control over both Congress and the judicial bench, and when a strong man like Benito Juarez or Porfirio Diaz occupies the presidential chair he has usually arrogated to himself dictatorial powers to which both the Executive and the Judiciary yield submission. This was especially the case during the long and, on the whole, beneficent rule of President Diaz, who, when he deemed it necessary, dictated the legislation which should be passed by the Congress and the judgments to be pronounced from the judicial bench.

So long as this supreme personal control could be maintained, and its exercise was directed towards promoting the general welfare of the country, the system had many obvious advantages in a nation like Mexico. It ensured continuity of policy and a firm administration of the law, independent

of the vicissitudes of party politics, and tended eminently, as experience has proved, towards rapid and apparently permanent economic progress and development. But when it collapsed and the control which it exercised disappeared the Republic speedily degenerated into a condition of semi-anarchy in which the rivalries and ambitions of individuals had free play, and groups of self-seeking politicians endeavoured to exploit the country for their own personal ends.

This fissiparous tendency has never been displayed more clearly than in the conditions which followed the resignation of President Diaz in 1910. When he was forced from office by the Madero Revolution the Republic, which for more than a generation had enjoyed the benefits of orderly administration, speedily became torn by dissensions, brigandage, to which, unfortunately, the Indian and Mestizo elements of the Mexican population seem especially prone, became rife once more; life and property were no longer safe, communications were interrupted, industrial progress was checked or entirely abandoned,[1] robber bands levied forced contributions from peaceful inhabitants, and the internal conditions reverted to a state resembling that which prevailed from 1821 down to the beginning of Porfirio Diaz's second term in 1884. The present Government, under the provisional presidency of General Huerta, did something to check the retrograde movement that began under the lax and feeble administration of President Madero. More would have been accomplished but for the singular attitude of the Government of the United States, which, by refusing recognition to General Huerta as Chief Magistrate, and by its half-hearted suppression of the traffic in arms and ammunition carried on across the frontier with the rebels in the five Northern States, has tended in a marked degree to perpetuate the state of unrest and rebellion

[1] Many mines, smelters, mills, and factories of various kinds were obliged to shut down in 1913.

that has prevailed in Mexico in greater or lesser degree since 1910.

It is only just to the United States Government to state that so far no direct official countenance has been given to the opponents of General Huerta's administration, which has now been recognized by nearly every civilized Government, including all the principal European Powers.

But no effective restraint was imposed upon individuals and corporations which, for their own ends, promoted rebellion in the Mexican Republic and furnished aid and succour to the rebels.

This has been done not merely for the purposes of gain, as when American manufacturers sold arms and ammunition to the Mexicans, with whom their own countrymen were at war, in 1847–48, and smuggled all sorts of military stores across the frontier for use against the United States soldiers. It has also a political object. A large body of opinion in Texas and other border States is in favour of territorial extension south of the Rio Grande. The schemes organized in furtherance of this object have barely been concealed. Inspired reports have appeared again and again in American newspapers to the effect that five or six of the Northern States of Mexico had decided to secede from the Republic and ask for admission to the United States, and every device of publicity has been used to prepare American opinion for a favourable reception to this request.

So far the Mexican rebels have not risen to the bait that has been held out to them. True patriotism is a rare virtue in Mexico, where men follow personalities rather than principles, and where parties are designated after the names of their leaders instead of by the shade of political faith which they maintain. But even in Mexico the civic virtues have not sunk to so low an ebb that the " Carranzistas " dare adopt the policy of national dismemberment suggested to them by

their friends in the United States. Señor Carranza still aims at being the ruler of a United Mexico, and his followers would fight to the death against a partition of their country.

It is very difficult for a European to appreciate the attitude of the average Mexican. He will engage without hesitation in political enterprises which even to his narrow outlook tend to the ruin of the nation; he will rebel against legally constituted authority on any or no pretext, and sacrifice the most vital interests of the community with alacrity and destroy its credit and financial stability, even imperil the national independence without regret or remorse; but he would bitterly resent any outside interference with Mexican liberty, and the prospect of foreign intervention would be the surest method of combining all the warring parties and interests to resist the invader.[1]

The Mexican's point of view may be, in some degree, understood if it is remembered that to him politics is an almost purely personal matter. He sees in the success of an opponent not the triumph of a principle or of a particular school of political thought, but the victory of an individual whom he feels himself justified in circumventing by any means in his power, including personal violence. A defeat at the polls is, in his opinion, ample justification for him to attempt to secure by force of arms what he has failed to achieve by arguments or votes. Political animosity becomes an acute personal grievance, which he pursues with the intensity and ferocity of a vendetta, regardless of its effect upon the public welfare.

This peculiar attitude in regard to political strife is not singular to Mexico, but is, in the main, characteristic of the whole of the Latin-American republics. It is in a large degree

[1] This was written in August. In October, Señor Carranza and other rebel leaders publicly declared their readiness to combine forces with the Government troops to resist the intervention of the United States.

a consequence of the Spanish dominion and its method of government which endured on the American continent for three centuries.

Throughout that long period the arbitrary rule of the Viceroys of Spain was the only form of administration which the Mexican knew. The same system has been pursued under democratic forms. And although Mexico adopted a Republican Constitution in 1857, the Mexican people have never learned, and indeed seem incapable of learning, how to wield the instrument of constitutional and representative government. They possess the form, but the spirit wholly eludes them. The result has been that whatever the nominal form of government, in practice resort was always had to autocratic and despotic methods. Elections, as will presently be shown, are merely a matter of form, and the Legislature is little more than a machine for registering and giving the semblance of legality to the dictates of a despot.

The Mexican, therefore, while he professes to adhere to the forms of constitutionalism, shows clearly by his acts that he has no faith in its efficacy as applied to his own country. He realizes with perfect clearness that the individual who may be chosen as the head of the State can, if possessed of the requisite strength of character, control the Legislature, the Executive, and the Judiciary, and establish personal and autocratic rule.

The evils of such a condition of affairs are only too obvious to the student of Mexican politics and history, and make it possible to understand how a people of the same race and speech and faith can engage in relentless and bitter warfare with each other, generation after generation, upon questions which go no deeper than mere administrative leadership.

The phenomenon of comparative peace and good order which Mexico presented under the presidency of General Porfirio Diaz in no way weakens the force of this argument. It was solely the personal qualities of that remarkable man,

who combined in himself an extraordinary knowledge of the Mexican people with a force of character and an iron firmness of will, which enabled him to overcome all opposition to his plans. He knew how to rule his restless and turbulent people, and had no scruples whatever as to methods.

Porfirio Diaz was no mere *roi fainéant*. For thirty years he could have said, with greater truth than Louis XIV, "L'état, c'est moi!" He was a strong, fearless man, who knew his people, and ruled them as they really like to be ruled.

The greatest admirer of Diaz would not claim that he was a strictly constitutional ruler. His government was invariably a despotism—sometimes a benevolent despotism, sometimes the reverse, but always a despotism. Under Don Porfirio's paternal rule there was no sparing of the rod. Attempted revolution, insubordination, even adverse criticism of the dictum of the President,—which had more force than a ukase of the Tsar of Russia,—was suppressed with a thoroughness that often bordered upon ruthlessness. But for many a long year Mexico loved the strong hand that gave her peace and prosperity, and to-day a majority of the people would welcome back Porfirio Diaz if that return were possible.

While health and vigour remained to him he maintained his position and authority by means which, though very effective, would not commend themselves to people accustomed to matured constitutional government. The Army, and that remarkable body, the *guardias rurales*, which he himself created, were devoted to his service, and were used with unsparing hand to suppress even the mutterings of discontent. His absolute control of the administration enabled him to secure the election of a docile Legislature which would offer no opposition to his plans. The governors of the States were his creatures, who carried his behests into effect and made certain that the Deputies returned to Congress were such as would be

content to acquiesce in proposals which had the presidential approval.

This manipulation of elections, to which reference has already been made, is worthy of close attention. It was carried to perfection under Diaz, and the system has in no way been changed. At the last election in 1911 Congress was virtually selected by Señor Gustavo Madero, brother of the President, Señor Francisco I. Madero, who acted as chairman of the Committee charged with the verification of the election returns. After the process of selection—it would be a misnomer to term it a verification—a question was raised as to the Deputies said to have been returned for a particular constituency. Congress ordered the voting papers to be laid on the table, and it was then found that Señor Gustavo Madero and his Committee had never even taken the trouble to break the seals of the official packets, but had simply reported as duly elected the candidates upon whom he knew he could rely.

The incident was a little awkward at the moment, because attention had been directed pointedly towards it, but it was soon forgotten. Everybody knew that practically every member of Congress had been chosen in similar fashion. There would have been no use in having a fresh election, because the result required by the party in power would have been achieved in the same way, though the procedure might be a little more adroitly and discreetly managed.

General John W. Foster, who was United States Minister in Mexico from 1873–80, a period which covered General Porfirio Diaz's first term as President, has left on record an interesting description of Mexican electoral methods. In his *Diplomatic Memoirs*, published in 1903, General Foster, who was a man of distinction and of the highest probity, says :—

" I found that in the last twenty years the country had been divided into two parties contending for great principles, vital to the peace and prosperity of the nation; but these had

not resorted to the ballot box, but to an appeal to arms. When the Liberals triumphed the Conservatives not only laid down their arms but withdrew from all participation in politics and exercise of the electoral franchise, after which the political campaigns became contests of persons and not principles, as the Liberal party alone participated in them.

" Worse than this, it seemed that there was a conviction among the electors that the party in power would control the result of the election in favour of its candidate without regard to the ballots cast. . . . During my seven years in Mexico I often visited the polling places on election days, but I never saw a citizen deposit a ballot, and rarely did I find any persons at the polls besides the election officers. . . . Everybody understood that the elections were a farce. The officers ' to be elected ' were fixed upon by the Governor and a special circle, and the list was generally known before the election was held."

Later on General Foster returned to Mexico, " when," he says, " I found the same condition of affairs existing. A Congress-man found at the voting place which it was his duty to open, stated that as no one had come to vote, he had not been able to organize an election board; but as he had a list of the persons who ought to vote, he would make up his poll list from that, and report the result, saying, ' This I am ordered to do, and I cannot fail to do it.' . . . The want of education of the masses makes them indifferent to or incapable of an intelligent use of suffrage, and the long revolutionary struggles which preceded their independence accustomed the people to the settlement of political questions by a resort to arms. Besides, in their colonial state they had not enjoyed in any degree the local self-government of the British-American colonies, and not until education is more generally diffused among the masses may we reasonably expect those countries to be ruled through the exercise of the electoral franchise."

A perusal of General Foster's *Memoirs* recalls the interesting circumstance that General Diaz's position, with regard to recognition by the United States, when he became President after his successful revolt against President Lerdo in 1876, was exactly the same as that of General Huerta at the present time. Diaz had to wait sixteen months before the United States recognized him. General Foster complains that this delay on the part of his Government caused him to be placed in a position of considerable difficulty.

"To aggravate the situation," he adds, "all the other Governments made formal recognition through their ministers soon after the constitutional inauguration. The delay on the part of the United States, besides being a great disappointment, was a source of much embarrassment to the new Administration in Mexico."

These words might have been written of the present situation in Mexico. Then, as now, there were difficult questions raised about the lax administration of the American authorities on the frontier, so that the situation of forty years ago has exactly reproduced itself, even to the arguments used by the Mexican Foreign Minister, who in his recent correspondence with Mr. John Lind (who went to Mexico as President Wilson's confidential agent), urged, as his predecessor did in 1876, that all nations, except the United States, had recognized the *de facto* President. It is impossible to avoid coming to the conclusion that President Wilson in August last copied almost word for word the dispatch of President Grant to General Foster, and modelled his diplomacy on the same lines. He even declares, as Grant did, that before recognizing the President he must wait until the people of Mexico have expressed their opinion in a general election.

There Mr. Wilson and his Secretary of State reveal their plentiful lack of knowledge of Mexican affairs. Nothing

ever changes much in that strange country, and least of all its electoral methods. A Diaz may for a time suppress their usual accompaniments of disorder and revolution, but the methods remain the same, and elections are conducted to-day just as they were forty years ago. Whoever, for the moment, has control of the Executive also controls the ballot boxes, and the candidates whom he approves will, to a certainty, find themselves credited with having received a majority of the suffrages of the "free and independent electors."

General Victoriano Huerta may not be a candidate for the Presidency in the election that is to be held a few weeks after these words are written. Indeed, he is precluded from being one by the provisions of the law, which, of course, every Mexcan scrupulously observes—in theory. But the party which he represents will see to it that it retains control of such central authority as now remains to the occupant of the National Palace. The Carranzistas in the north, and the Zapatistas of Morelos, who know the ways of their countrymen rather better than does President Wilson or Mr. William Jennings Bryan, will be under no delusions about the voice of Mexican public opinion as expressed through the ballot boxes. So long as they can procure arms and ammunition from the United States, they will continue to employ the usual Mexican arguments against General Huerta's successor, whether he is recognized by the United States President or not, and affairs will proceed as they have done for the past three years, until a man arises strong enough to compel the Mexican people to submit to his authority.

Whether Mexico possesses such a man is not apparent for the moment. There are some who believe that General Felix Diaz, one of the candidates in the presidential election, may be the *deus ex machina* who can restore public order. His record as Commissioner of Police for Mexico City under

his illustrious uncle, at all events, shows that he possesses some of the necessary qualities which Mexicans respect in their rulers. He is firm in character, not too particular in his methods, ruthless in their application, and, when necessary for the accomplishment of his ends, sets the low value upon ordinary human life that has always been characteristic of successful Mexican rulers, and which the people who pay the butcher's bill would be the last to think had been appraised too cheaply.

The immediate causes of the upheaval which has kept Mexico in turmoil for nearly four years are not difficult to discern. General Diaz, after eight successive terms as President of the Republic, had grown old and feeble. The firm hand which had held the turbulent Mexicans in check and compelled their obedience lost its grasp, and discontent, where it existed, gradually developed until it became rebellion. An important factor in worsening the situation was the growing unrest of labour. The industrial ferment which in the last decade has affected most countries spread also to Mexico, where the peons, thousands of whom live in a state but little removed from slavery, and the general mass of ordinary labour began an agitation for improved conditions. Taking advantage of all these circumstances, the whole of the scattered groups of discontented politicians opposed to the Diaz regime combined together and, with Señor Francisco I. Madero at their head, initiated an attempt to overthrow the old President.

General Diaz at the time was suffering from ill-health, and his entourage either minimized or concealed from him altogether the serious condition of affairs until it was too late. The discontent finally broke out in open rebellion, and in March 1911 the President was forced to resign. Peace was then patched up between the warring parties. Señor de la Barra, the Foreign Minister, assumed office as provisional

President, and five months afterwards Señor Madero was elected President of the Republic.

It is almost universally agreed in Mexico that this event was one of the most disastrous which ever befell the country. The new President, a man of weak character, an idealist and a visionary, surrounded himself with a group of politicians who had no experience of administration and were almost wholly without knowledge of the art of government. Favouritism, self-seeking, and peculation became rife. The extravagant promises of reform and improvement which had been made by Señor Madero and his supporters remained unfulfilled, and in a few months the people of Mexico were as much dissatisfied with the Madero Government as they had been with that of President Diaz in the later years of his administration.

There was also this additional cause for uneasiness—that, while Diaz fostered and encouraged the development of the country and protected foreign enterprise, to which Mexico owed its prosperity, President Madero and his friends were indifferent or actively hostile to it, and showed themselves inclined to look with friendly eyes upon anti-foreign agitation. Mexicans with broad views who were really desirous for their country's welfare became alarmed at the tendencies which they saw developing, and especially at the rapid growth, under Señor Madero's lax administration, of bands of robbers and highwaymen, which had been rigorously suppressed under President Diaz. Finding that all peaceful efforts to secure better government failed, General Felix Diaz, a nephew of the ex-President, raised the standard of revolt at Vera Cruz in October last and endeavoured to overthrow the Madero Administration.

That attempt ended in complete failure, mainly, it is said, through the lavish employment of Government funds in bribing the leading revolutionists, and names are freely

mentioned of men who were openly bought over from the cause they had pledged themselves to serve. General Diaz and General Reyes were taken prisoner along with their principal supporters, and were incarcerated first in the fortress of San Juan de Ulloa in Vera Cruz harbour, and afterwards in Belem gaol in Mexico City. There they remained until February 9 in the present year, when a fresh revolt broke out in the capital itself. The two leaders were released, and, placing themselves at the head of the rebels, they succeeded, after ten days' fighting, during which several thousand lives were lost in Mexico City, in overthrowing the Administration and set up a provisional Government.

President Madero, his brother Gustavo Madero, and the Vice-President, Señor Piño Suarez, were killed, it is said while attempting to escape, but the exact circumstances attending their deaths have not yet been made public officially. General Huerta, who was commander-in-chief of the army under President Madero, and whose defection was the deciding factor in the successful rebellion, was elected Provisional-President, and a Government composed of Diaz supporters, or "Felixistas," as they are termed in Mexico, was appointed.

Foreign influence played a part in bringing General Huerta and General Felix Diaz together, though it may not have had any share in the arrangement of the actual compact which placed Huerta at the head of affairs as Provisional-President, to hold office until Felix Diaz should be chosen at the elections.

This, in brief, was the course of events in the Republic from the downfall of President Diaz to the advent of the present Administration, but it is necessary to treat in some detail the events which accompanied the Revolution of February 1913. The plot was a continuation of the unsuccessful attempt made by General Felix Diaz and General Bernardo Reyes at Vera Cruz in the previous October. While these two

leaders were in prison, sympathizers carried on their plans. General Manuel Mondragon and General Gregorio Ruiz are said to have been their chief agents in securing the support of a portion of the garrison of Mexico City, without which a rising would have been hopeless. It was recognized by the revolutionists that if they were to succeed the blow must be struck in the capital, because possession of it would give them a control over the national destinies which no amount of success elsewhere in the Republic could equal. The experience of past revolutions had shown that whoever was master in Mexico City possessed a *point d'appui* worth many thousand men. It is the nerve centre of the national life, and there is a singular tendency among the Mexican people to regard the Government established there as entitled to claim their loyalty and adhesion. Local leaders elsewhere may be able to claim large followings and maintain a protracted struggle against the central authority, but their adherents, in spite of themselves, look upon their position as that of guerrillas and rebels, however legitimate their action may be. It is only when they have succeeded in securing possession of the city that they come to feel that their movement ceases to be an insurrection and becomes a government.

Recognizing this peculiar trait in the psychology of their countrymen, the agents of Felix Diaz set themselves to seduce the troops in the capital from their allegiance. The task was not particularly difficult. Disaffection was rife, and was spreading rapidly. Every one could see for himself the downward tendency of Mexico under the Madero regime; but what was even more potent in determining the attitude of the host of hungry office seekers which always hangs round the skirts of a government in power, was the fact that the Madero Administration pursued a policy of flagrant nepotism in its appointments which shocked and disgusted even the Mexicans. At the time of the revolt over one hundred members

of the Madero family held well-paid offices under the Gorvernment. This naturally meant the exclusion of men who had risked everything to aid the President in his struggle against Diaz. These disappointed politicians turned against their leader, and their speech and example did much to prepare the way for the Diaz-Reyes *coup*.

It is said that the plans for the revolt were not matured at the moment it began. But on Saturday, February 8, Generals Mondragon and Ruiz and Señor Cesilo Ocon learned that the Government had got knowledge of what was afoot, and they resolved to act immediately. They had previously sounded the officers of the troops quartered at Tacubaya and other suburbs, and were fairly certain that most of them, except those at the Castle of Chapultepec and in the neighbourhood of the National Palace in the city could be relied upon. Late on Saturday night the three gentlemen already named had a conference with the officers at Tacubaya, and it was decided that the troops there and the cadets of the military college should march at daybreak. Colonel Anaya, commanding the 1st Cavalry regiment, was the senior officer on the spot, and when his opinion was asked he replied: "I am an old man, and my life matters little to me. I am for immediate action."

The night was spent in preparation, and just before dawn on Sunday morning, February 9, the cavalry, together with the 2nd and 5th Artillery regiments, marched out from Tacubaya Barracks for Mexico City. They were joined by the 1st Artillery regiment at La Libertad, and proceeded straight to the prison where General Diaz was confined. Colonel Anaya gave the governor of the prison five minutes in which to release his prisoner; but before that time had elapsed General Diaz stepped forth a free man and took command of the troops. Meanwhile the military cadets, joined by some soldiers, had visited the military prison of Santiago and released General

Reyes and all the other prisoners confined there, and set the building on fire.

General Diaz after his liberation had marched to the Ciduadela, which was captured after a brief resistance offered by General Davilla, the commandant, who had a garrison of only one hundred men at his disposal. The Ciduadela was a valuable prize for General Diaz. It contained a vast amount of arms and ammunition and military stores of all kinds, and was captured at a very trifling cost to the troops engaged. Indeed, the most remarkable aspect of the whole ten days' fighting that ensued was the comparative immunity of the soldiers. According to the official reports only about two hundred and fifty soldiers were killed, while the loss of life among the civil population is estimated at nearly three thousand; but the actual number will never be ascertained.

The most dreadful incident of the revolt occurred on the Zocalo, the great square in the centre of the city where the Cathedral and the National Palace are situated. Hither after the fall of the Ciduadela came a force of cavalry under the command of General Reyes. It seemed as if the whole of the military in the city had gone over to the rebels, and a crowd of civilians followed the horsemen on to the Zocalo, cheering for Felix Diaz. The square, which is the centre of the tramway system, was filled with the customary Sunday morning assembly, gathered for the usual promenades or to proceed by the cars to suburban resorts. Large numbers of persons, mostly women and children, were leaving the Cathedral after divine service. When General Reyes entered the square with his cavalry the 1st Infantry regiment was drawn up in line along the part of the National Palace facing the square. The front rank was lying down, while the rear rank stood immediately behind them with their backs against the Palace wall. General Reyes led his cavalry across the square and halted them facing the waiting infantry. Everything seemed

peaceful, and the throngs of civilians believed that a bloodless *coup d'état* had been effected. For nearly a quarter of an hour there was no sign of hostility, and the populace moved freely up and down between the soldiers, while the congregation from the Cathedral stood in dense masses watching the scene.

Suddenly from an office at the door of the National Palace came a sharp order of " Fuego," and instantly a line of flame spurted from the rifles of the infantry men, and the peaceful, tree-shaded Zocalo became a slaughter pen. The cavalry crumpled up under the withering blast. Men and horses fell by scores, and the civilian onlookers were mowed down in swathes by the hail of bullets that swept across the crowded square. A moment after the first volley two machine guns on the roof of the Palace opened fire, and their projectiles cut bloody lanes through the terrified throng. General Reyes fell dead at the first fire, shot through the head; women and children were killed, literally in heaps. In less than four minutes some three hundred dead and about seven hundred wounded were lying in the bloodstained square. Wounded and riderless horses galloped madly about trampling on the fallen bodies, and crushing the life out of the injured. A horrible feature of the scene was that the wounded were allowed to lie for hours untended, and the dead remained for days where they had fallen. In the night that followed ghouls from the lower quarters of the city crept into the square rifling the dead. They cut the hair from the heads of the women and children, and hacked off the fingers and hands of scores in order to possess themselves of the rings and jewels on the corpses. The bare statement of this dreadful fact, which is amply authenticated, is the most scathing comment that can be made on the civilization of the lower classes of the population in Mexico City.

A vivid contemporary description of the Sunday morning

scene on the Zocalo appeared in the *Mexican Herald*, an English newspaper published in Mexico. It says :—

"Three minutes before the battle on the Zocalo in front of the National Palace began yesterday morning nothing seemed more remote than a fight. A long line of cavalry of the 1st Regiment, the men who had demanded and obtained the release of General Felix Diaz and General Bernardo Reyes from prison, were drawn up in perfect order in front of the National Palace, and about fifty feet from it. They were facing the building. Their carbines were resting over the pommels of their saddles.

"About forty feet to their front another long line of soldiers, infantrymen, lay prone upon the ground, their rifles in hand, and all facing the cavalrymen. These infantrymen were about six feet apart, and stretched for two-thirds of the length of the building.

"Back of the prostrate infantrymen stood another long line of foot soldiers, so close to the Palace wall that their backs almost touched it.

"Behind the cavalrymen an enormous crowd had gathered. They were expectant, but not apprehensive. They were looking for no trouble, immediate or otherwise. What they really expected was that either Felix Diaz or Bernardo Reyes, or both, would appear shortly on one of the balconies of the National Palace and harangue the crowd and soldiers.

"The people who had gathered had shouted themselves hoarse in giving vivas for Diaz and Reyes, interspersed with 'mueras' for President Madero. They were good-natured and laughing. Many women and not a few children were with them. It seemed like a holiday gathering, and the soldiers apparently were enjoying it just as were the people. . . .

"It looked as though Felix Diaz and his soldiers had won a bloodless victory, and that all was over but the shouting. The first untoward incident happened at the President's entrance to the Palace.

"A heavily built man in citizen's clothes was flourishing a revolver, threatening a small group of people who were gathered about the entrance, probably drawn there by curiosity.

"The little group scattered quickly to get away from the menacing pistol. Less than one minute later there was a single shot, and instantly some officer shouted the order to fire. Reyes was one of the first to fall.

"In a fraction of a second soldiers lying on the ground and those against the Palace wall fired a volley point blank at the cavalrymen and emptied many saddles. But the cavalry were quick to return the fire and then the battle was on.

"Infantrymen stationed on the roof of the Palace and in the towers of the Cathedral added their rifle shots to the battle, and then came the terrible muffled roaring of the machine guns on the roofs. The crowds ran in panic to get off the Zocalo, that very ancient battlefield where during the centuries so many thousands of men have died. Many more dead were added yesterday to the long list. They fell in scores, both soldiers and non-combatants, among the latter being women and children. It is said, and the number seems a moderate one, that more than two hundred persons were killed on the Zocalo yesterday and probably five hundred were wounded.[1]

"For fully half an hour (it was 8.45 o'clock when the battle began) firing continued, half dying away at times and then coming suddenly with greater fury than ever. Finally distant bugles were heard sounding 'cease firing.' There were a few scattering shots and then a welcome silence.

"Looking from the window of one of the upper floors of the building[2] one could see foot soldiers stretched along both sides of the street from the Zocalo as far south as the eye could reach. Not a civilian was to be seen."

During these events in the capital, President Madero was at the Castle of Chapultepec, the country residence of the President, about four miles distant from the city. When information reached him of the slaughter on the Zocalo he rode into Mexico City, protected by the Presidential Guard and a few cadets from the Military School who had remained

[1] This estimate was afterwards shown to be greatly under the actual numbers killed and wounded.

[2] The writer had taken refuge in a house on the Avenida San Francisco.

faithful. He crossed the fatal square where the dead and wounded lay in hundreds and entered the National Palace. A consultation, at which General Victoriano Huerta, commander of the army, was present, took place between the President and his advisers. Late that same night Señor Madero left the Palace in a motor car and went to Cuernavaca, where, it is said, he had an interview with Zapata, the chief of a notorious band of brigands, and endeavoured to induce him to come to Mexico City with his followers and support the Government. The President had some right to ask for Zapata's aid, because a regular monthly subsidy had been paid to him from national funds ever since Señor Madero had assumed office as Chief Magistrate of the Republic, partly to secure his good behaviour, and partly to attach him to the Maderista party. But Zapata had accurate information as to the probable course of events, and considered himself safer amid his fastnesses in Morelos than in the streets of Mexico City. President Madero having failed to obtain the assistance of the brigand chief, returned to the National Palace, which he never quitted again until he was taken a prisoner on the fatal journey to the Penitentiary.

There was a cessation of fighting in the city on Monday. A meeting of the representatives of foreign Powers was held at the American Embassy, and Mr. Henry Lane Wilson, the United States Ambassador, was authorized, as doyen of the Diplomatic Corps, to send a note to the Madero Government asking a guarantee of protection for the foreign residents. A similar request was communicated to General Felix Diaz, the leader of the rebels. General Diaz replied that he would be glad to afford protection, but had no troops available. No answer was received from President Madero, and Legation guards were organized by the foreign representatives from amongst their own nationals.

On Monday evening several rebel leaders, including General

Gregorio Ruiz, who had been captured on Sunday evening, were executed by order of the Government. On Tuesday there was a renewal of the fighting. Both sides used artillery, the Government troops directing their projectiles against the Ciduadela, the rebels against the National Palace. Little or no damage was done to either of these, but private buildings in the neighbourhood of each and in the lines of fire between them were wrecked by shells, and many civilians were killed, among them being several foreigners. The inhabitants of the city throughout the day, and during the subsequent days that intervened before the Madero Government was overthrown, manifested almost complete indifference about the revolution that was in progress. Many of them were old enough to remember previous risings, and experience had taught them that whichever side was successful their lot would remain much the same. So they went their ways unheeding, or gathered in groups here and there to watch the progress of the fighting between the rebels and the Government troops. Hundreds of them paid for their curiosity with their lives; but life is held cheap in Mexico, and the casualties attracted little attention. As a rule the bodies of the dead were allowed to remain where they fell, and days elapsed before the corpses were collected in heaps and burned on the public streets and squares.

This apathy towards events which in any other country would create consternation and panic, is no new feature of the Mexican people. In the Revolution of 1840 against President Bustamente, when the rebels held the National Palace and the Government occupied the Ciduadela, observers noted the same characteristic. Madame Calderon de la Barca, who has been already quoted, wrote :—

> "The tranquillity of the sovereign people during all this period is astonishing. In what other city in the world they not have taken part with one side or the

other? Shops shut, workmen out of employment, thousands of idle people, subsisting, Heaven only knows how; yet no riot, no confusion, apparently no impatience! Groups of people collect on the streets, or stand talking before their doors, and speculate upon probabilities, but await the decision of their military chiefs as if it were a judgment from Heaven, from which it were both useless and impious to appeal."

In another letter Madame Calderon says :—

"This morning General —— sent a few lines from the Ciduadela, where he and the President are, in which he speaks with confidence of speedily putting down the rebels. Calderon (her husband) returned many affectionate messages, accompanied by a supply of cigars. They say that the greatest possible bravery is shown by the boys of the military college, who are very fine little fellows, and all up in arms on the side of the Government."

Exactly similar incidents happened during the revolt of February last. People sent food, drink, and cigars to their friends in the Ciduadela or the National Palace; and, as in 1840, every one was talking of the courage and determination of the lads from the Military College. Then, however, the cadets supported the Government, this time they sided with the rebels.

Two instances may be given of the resolution and fighting spirit of the cadets. During one of the attacks on the Ciduadela a party of several hundred Government troops made their way through cross streets into a thoroughfare close to the Diaz headquarters. Some cadets, who were on the watch, discovered the movement, and running a machine gun into the street took the soldiers unexpectedly in flank with a devastating hail of bullets that practically wiped them out before they could effect a retreat. Even more striking evidence of their ruthless determination was given by another party, which, under the command of Colonel Morelos, had got

into a desperate position near the Zocalo, where resistance seemed hopeless. The colonel, anxious to save the young lads under his command, many of whom were mere boys of twelve or fourteen, advised them to lay down their arms and surrender. But the youths were made of sterner stuff than their commander. Their reply to Colonel Morelos's well-meant advice was to disarm him, place him against the wall and shoot him dead on the spot. Having thus vindicated the sacred right of revolt against constituted authority, the most precious to the Mexican heart, the cadets made a wild dart for liberty. Some escaped directly back to the Ciduadela, others made their way round behind the National Palace and rejoined their comrades later on at the Diaz headquarters.

Meanwhile the fighting went on in the heart of the city. Cannon were fired indiscriminately, wrecking houses and killing non-combatants in all directions. The American Consul-General, Mr. Arnold Shanklin, and the Deputy-Consul, Mr. van Horn, with their staff had a miraculous escape. The Consulate building on the corner of the Alameda and the Calle Balderas was in the direct line of fire between a rebel battery at the Ciduadela and a Government battery near the new National Theatre. No warning had been given to foreign residents that a bombardment was about to begin in that quarter, and Mr. Shanklin and his clerks were at work when a shell crashed through the walls of the building and another carried away the cornice from above the window of the room where the Consul was sitting.

The occupants of the building made a hurried retreat to the basement. They had barely got there when a second volley of projectiles burst in the rooms they had vacated, completely wrecking the Consulate offices. The plight of the Consul and his staff was desperate. Shells were continually hitting the building, which might take fire at any moment. The only apparent avenue of escape was by the Calle Balderas, and it

was suicide to attempt to cross that bullet-swept thoroughfare. Then some one remembered there was a door on the ground floor which, though locked, led into an adjoining building that gave on to the Avenida Juarez. By desperate efforts the door was forced off its hinges, everybody working for dear life, while the shells crashed overhead and a hail of machine-gun bullets pattered against the walls and roof. Another door was forced in similar fashion, and the whole party, including a wounded man who had been picked up off the street when the firing began, succeeded in escaping to a place of safety.

Other foreigners were not so fortunate. In the Calle Roma a shell burst in the top flat of a pile of buildings, killing an American lady and grievously wounding two others. Several other Americans were also killed, and a number of foreigners have been missing since the revolution, though there is little doubt as to their fate. There are numerous well authenticated instances where inoffensive citizens who happened to wander by accident into the debatable area after dark, were captured and shot by Government patrols without explanation or trial, simply because they were unable to give the countersign for the night. Persons were shot in broad daylight at places far remote from the actual theatre of conflict. These is little doubt that many Mexicans took opportunity during the disorders to gratify their lust for blood. Men lay on the roofs of houses, armed with rifles, and fired at everything living that came within range. A poor woman, accompanied by her little daughter, aged eight, was going with some food to her husband, who was employed as caretaker in a house in the Colonia Roma, when both were shot dead. Their bodies lay in the street for five days before they were removed. Incidents like these could be multiplied, but enough has been said to show the character of the events that occurred in the city during the ten days the rebellion lasted.

When it seemed as if neither General Felix Diaz nor Pre-

sident Madero could obtain mastery, a meeting was brought about between the former and General Huerta, commander of the Government troops. These two gentlemen met first at the American Embassy and afterwards at the Ciduadela, where a secret compact was signed by them under which General Huerta agreed to join the rebels on condition that he was appointed Provisional-President of the Republic, to hold office until General Diaz could be constitutionally elected to the Presidency. This arrangement marked the end of the Madero regime. The President and his brother, Gustavo Madero, and a number of their supporters, including Señor Piño Suarez, the Vice-President, were arrested. The two Maderos and Suarez were killed, and General Huerta was installed as Provisional-President. Before this latter act was accomplished Señor Laurican, a member of the late Government, was appointed Acting-President for the purpose of signing certain decrees. This accomplished, he resigned, his tenure of power having lasted just twenty-six minutes, as some observers were careful to note.

It is necessary, in order that the situation in the Republic may be clearly understood, to go back for a moment to 1910 to consider the events which preceded the downfall of President Porfirio Diaz and led up to the present era of turmoil and rebellion in Mexico.

CHAPTER VII

PRESENT CONDITIONS

Causes of the present unrest — President Madero's failure — Mexican progress checked by the Madero policy — Abortive schemes of reform — Necessity for a strong President—General Felix Diaz—Safety of foreigners —Agrarian reform

PERHAPS the chief cause for the development of the agitation against the continuance of President Diaz in power may be attributed directly to the President's own action. Some time before his election for his last term of office he had explicitly stated that under no conditions would he again allow himself to be nominated for the Presidency. In an interview with a representative of an American Magazine, President Diaz made the following statement in March 1908, and its veracity has never been questioned. His words were : " No matter what my friends and supporters say, I retire when my present term of office ends, and I shall not serve again. I shall be eighty years old then. I have waited patiently for the day when the people of the Mexican Republic will be prepared to choose and change their Government at every election without danger of armed revolutions and without injury to the National credit or interference with National progress. I believe that day has come. I welcome an Opposition party in the Mexican Republic. If it appears, I will regard it as a blessing, not an evil ; and if it can develop power, not to exploit but to govern, I will stand by it, support it, advise it, and forget myself in the successful inauguration of complete democratic government in the country."

This interview was reproduced by practically every paper in the Republic, and created a very deep sensation. Probably the majority of the people were rejoiced by it, because, with the spread of knowledge of the methods of government in other countries, Mexicans were undoubtedly becoming a little restive under the despotic methods of President Diaz. At all events certain elements in the population took the President at his word, and there immediately began a discussion of possible candidates for the Presidency, and of various questions relating to popular government. Diaz watched this movement very closely, and from his unrivalled knowledge of Mexican affairs he very speedily discerned that it was not travelling in the direction in which he had anticipated. There were symptoms which showed that his retirement at that stage might lead to a revival of the old conditions which had distracted Mexico for fifty years after the achievement of Independence.

While the new movement was at its height friends of the President began quietly to circulate statements to the effect that his promise to retire at the end of his term could not, in view of the turn that events were taking, be regarded as final. The leaders of the opposition movement recognized that if these hints correctly represented the President's opinion, it would be hopeless to oppose him at the Elections, and they agreed among themselves that, while they would not nominate a candidate directly in opposition to him, they would endeavour to secure a free choice in the election of the Vice-President, so that in case Diaz should not live through the next term, his successor would be a man in sympathy with the views of the opposition.

The President made no sign as to whether he approved or disapproved of this plan, and immediately a widespread agitation was begun. Political clubs were organized, and meetings held with the object of securing the election as

Vice-President of someone in sympathy with the Opposition. This movement was organized by what is known as the Central Democratic Club, and the main points in its programme were the following :—

Abolition of the Jefes Politicos, and the transference of their powers to the Municipal Boards of Aldermen.

The extension of Primary Education; Suffrage rights to be enacted and enforced, placing the franchise on a mixed educational and proper basis.

Greater freedom for the Press.

Stricter enforcement of the Laws of Reform, especially those against Monastic Orders, etc.

Greater respect for human life and liberty, and a more effective administration of justice.

Legislation making it possible for working men to secure compensation from their employers in case of accidents, and to enable the public to sue railway and other transportation companies on the same ground.

New agrarian laws for the encouragement of agriculture.

General Bernardo Reyes, the Governor of Nuevo Leon, was selected as the Opposition candidate for the Vice-Presidency. The Mexican people are peculiarly apt to be attracted by novelties in politics, and the proposals of the so-called Reform party met with very considerable support in various parts of the country. It became evident that in the event of an election Señor Corral, the existing Vice-President, would probably be replaced by General Reyes. This was not quite in accordance with the views of President Diaz, and he proceeded to suppress the agitation. Army officers who had expressed themselves favourable to General Reyes were ordered away to remote districts; Congressmen who held similar views were deposed from their positions; meetings of the Reform party were suppressed throughout the country, and many of its leading supporters were arrested and thrown into jail.

In several places the suppression of the meetings was

accompanied by considerable disorder, and at Petape in Oaxaca, at Tepamas in Colima, at Tehuitzingo in Puebla, and at several places in the State of Morelos these disturbances resulted in loss of life. Several newspapers which supported the movement on behalf of General Reyes were suppressed and their editors imprisoned. General Reyes, who had long been intimately associated with President Diaz, and had been his nominee for the Governorship of Nuevo Leon for over twenty years, was wise enough to see that the movement could not succeed in face of the President's opposition, and he repudiated the nomination in his favour. He himself was dispatched by the President on a " military mission " to Europe, where he remained for about two years.

This was practically the end of the open movement against the Diaz regime. But it did not end there. A new leader was found in the person of Francisco I. Madero, a member of a wealthy family in the State of Coahuila. Madero was chosen probably because of a pamphlet which he had published in connexion with the 1908 election under the title of *La Sucescion Presidencial.* It included a strong indictment of the Diaz regime, and urged the people to insist upon their right to a free exercise of the franchise in the coming elections of 1910. The book was suppressed by order of the Government, but it nevertheless had a wide circulation and exercised a considerable influence on the democratic movement.

Then began the secret propaganda which ended in the Rebellion of 1910 and the ousting of President Diaz from office.

The plans for the overthrow of the President were carefully laid, and were worked with great ingenuity. The first stage was a widespread and skilfully conducted newspaper agitation, carried on, not only, so far as circumstances permitted, in Mexico itself, but with even more effect in the United States. For many months magazine and newspaper

articles, ordered and paid for, it is said, by the Madero faction, were published, mainly in the United States, attacking the unconstitutional methods of President Diaz, and developing a public opinion against him both in the United States and in Mexico, where the American publications were largely circulated. In the Republic itself, with the extension of political knowledge, which almost invariably accompanies material progress, unrest was growing, and the people were beginning to demand a larger share in the Government and in the increasing wealth of the nation.

Señor Madero had been placed at the head of the discontented section of the population, and by promising "all things to all men" secured a large following. In 1910 the movement had so far developed that he felt strong enough to raise the standard of revolt. At that time President Diaz was over eighty years of age and in failing health, and his grasp of affairs had become feeble. It is unnecessary to trace all the stages of this new movement. Suffice it to say that by March 1910 the Maderistas had gained ground so far that they were able to compel the old President to resign. There was an interregnum of five months, during which Señor de la Barra, who had been Minister from the Republic to the United States, and who had been recalled at the beginning of the troubles to assume the office of Foreign Minister, was appointed to act as Provisional President of the Republic.

The ignorant masses of the Mexican people expected the millennium to arrive with the advent of the new President; electoral reform, land reform, the breaking up of the great haciendas, higher wages—everything that could appeal to the prejudice or cupidity of the people—had been dangled before their eyes. The foreigners who owned or controlled so large a proportion of the wealth of the country were to be exploited or expropriated for the benefit of Mexicans.

So the ignorant mass of the population hailed Madero as the saviour and benefactor of Mexico. Alas for their hopes! Once seated in the Presidential chair, the new President forgot, apparently, all the promises made during the elections and while the revolt against Diaz was in progress. No attempt whatever was made to fulfil them, for the sufficient reason that they were impossible of fulfilment unless the State was prepared to adopt communism.

President Madero, a weak but no doubt well-meaning man, proved a very feeble administrator, and he made the serious mistake of surrounding himself with a group of inept and inexperienced advisers. Affairs in the Republic speedily became complicated and soon went from bad to worse. Taxes were not reduced as had been promised; the Public Debt was increased, and the peons and labourers saw no signs of "the mules and the lands" that Señor Madero had promised them.

When President Diaz went out of office there was a cash balance of sixty-three million pesos in the Treasury, or on deposit with foreign bankers in New York, Paris, and London. In addition, loans to the extent of about 100,000,000 pesos were floated; yet in February 1913, when General Felix Diaz and General Victoriano Huerta overthrew the Madero Government, an investigation of the financial resources of the Republic revealed the astounding fact that the whole of these large sums had disappeared, with the exception of 188,000 pesos.[1] What was even more disconcerting was that the Treasury accounts did not disclose the channels through which the money had flowed away. Only a few millions could be traced, and the Huerta Government found itself confronted with an empty treasury and saddled with the heavy task of settling a country seething with rebellion and discontent, mainly as the result of the feeble and corrupt administration of the Mexican Government.

[1] The peso, at par, is worth almost exactly two shillings.

No sane man would prophesy as to what may happen in Mexico, but in the opinion of most responsible people whom one meets in the country the Huerta Government represented the only group capable of securing a peaceful and progressive future. Its real leader for a short time after the Revolution of February was General Felix Diaz,[1] and most Mexicans who are not influenced by personal ambitions or feelings of revenge hoped that at the elections in October 1913 he would be chosen as President of the Republic.

According to the secret arrangements made by the new Government, its candidate for the Presidency was to be General Diaz, with Señor de la Barra as the official candidate for the Vice-Presidency. The plans that had been arranged contemplated an election in June, but towards the end of May General Huerta, it is said, made a compact with Congress (which was mainly Maderista in its constitution) to pass a vote refusing to hold any election before October 26. As soon as this was done, both General Diaz and Señor de la Barra withdrew their candidatures for the time, so as to save the country from the turmoil of a premature electoral campaign. Señor de la Barra afterwards announced his absolute withdrawal, and accepted the post of Mexican Minister to France, because he clearly saw the complications that were likely to arise.

The events which accompanied the Revolution of February 1913, that ended in the overthrow of President Madero, are referred to earlier in this chapter, but it may be pointed out that as a result of them residents in the city of Mexico all through the summer of 1913 showed themselves very reluctant to take any active part in political affairs which might lead to a recurrence of the outbreaks that had marked the

[1] Some months after the Revolution of February, General Huerta, who had been appointed Provisional President, broke the compact made with General Felix Diaz, and the latter was obliged for his own personal safety to fly to Europe.

earlier part of the year. The incidents of the revolution were, all through the summer, the chief subject of conversation amongst people in the capital. Residents who had passed through these perils cheerfully gave up their time, whatever the business of the moment, to narrate the incidents of the street warfare to new-comers, or to conduct them round the city to point out the damage done by the bombardment. In the month of May, although an army of workmen had been engaged—at the expense of the Government, it may be said—in renovating shattered walls and wrecked buildings, sufficient traces of the havoc still remained to enable one to understand the blind recklessness, or worse, with which both sides used the terrible engines of modern warfare in the crowded city.

Public buildings, private houses, clubs, hotels, and factories had been riddled by shell fire and their walls pitted by rifle bullets until hardly a fragment of plaster remained. Strangely enough, foreign owned or occupied property in the danger zone suffered more, apparently, than the adjoining structures. The Young Men's Christian Association building, although constructed of ferro concrete, had its upper stories shot to pieces. The American Club was wrecked, and many private houses were pierced by shells, which killed numbers of the inmates.

The Huerta Government is still in power, though its personnel has been entirely changed. Señor de la Barra, its most experienced member, has left the country and accepted a diplomatic appointment in Europe, and Señor Rudolfo Reyes, who was regarded as the direct representative of General Felix Diaz in the Cabinet, was dismissed from office and arrested by order of General Huerta, and the other members of it were gradually replaced by friends of the Provisional President.

The new Government was early recognized by most foreign

Powers, with the exception of the United States. The refusal of President Wilson and the Washington Administration to recognize it, and the encouragement which this attitude gave to the rebels in the North, had undoubtedly a very important influence in thwarting the efforts of the Huerta Administration to restore order in Mexico.

In the foregoing pages a brief and necessarily much compressed account of the events attending the downfall of President Madero is given. He had only held office for about fifteen months, yet in that brief space his Administration had raised feelings of discontent and dissatisfaction to such a pitch that when General Felix Diaz and General Reyes were released from prison and raised the standard of revolt, a short ten days sufficed to put an end to his Government and his life at the same time.

The story of Francisco I. Madero is supremely tragic. Even his enemies conceded that he was a man who really meant well, but he was a visionary and an idealist without practical knowledge of government, and with little strength of character. During his term of office he was no more than a tool in the hands of his more capable but wholly unscrupulous brother, Gustavo Madero. Both brothers paid the penalty of their failure with their lives, but their ill-fated attempt to govern has thrown their unhappy country back for a generation. It will require years and all the skill and energy of the strongest and best men which Mexico can produce to recover the ground that has been lost.

The late President belonged to a very numerous and enormously wealthy family, owning immense properties and controlling large businesses and commercial enterprises in various parts of the Republic, but especially in the Northern States of Sonora and Coahuila. The founder of the family was Evaristo Madero, who amassed a great fortune and was the father of eighteen children, nine sons and nine daughters. One of

these sons, Francisco, was the father of the late President of the Republic. The old patriarch himself only died in 1911, after his grandson had risen to the supreme power. His nine sons are all still alive, and control large and valuable properties, including smelting mills, cotton and flour mills, gold, silver, copper, and coal mines, besides rubber plantations and factories and oil-producing lands. They are also bankers and wine growers, and own about seven million acres of land in the State of Coahuila. At the time of his death Evaristo Madero's direct descendants numbered one hundred and twenty-four, and there were numerous collateral branches. The chief interest in this remarkable family, however, centres in Francisco Madero. He was a banker, and a very large landowner, when he took up politics and set himself at the head of the movement which overthrew General Porfirio Diaz.

The country during the years of peace which President Diaz's iron rule had secured had made not only immense material progress, but also a considerable intellectual progress. Foreign capital had flowed in, especially from the United States and Great Britain, and had produced great prosperity. Thousands of foreigners had settled in the Republic, and their influence had awakened the Mexicans to a realization of their situation. With that awakening came a popular demand for a change in the political methods which had hitherto prevailed in Mexico. Unrest and discontent were in the air, and it was obvious to all that the old order was changing. As already stated, the movement took final shape in 1910. In that year the public mind was excited and inflamed by the celebration of the centenary of the Mexican Independence. A few days after the close of the festivities Madero issued an appeal to the country calling upon the people to rise and secure by force of arms the reforms and benefits they were unable to obtain by peaceful means. In the same appeal he set out the changes which he meant to bring about, and promised a

distribution of land among the poor, a remission of taxes and many other reforms, not one of which, it will be recalled, Señor Madero made the least attempt to fulfil. On the contrary, he had not been long in power when he resorted to practices quite as arbitrary and unconstitutional as any charged against President Diaz. Even in the matter of elections, which he had proclaimed his intention to make absolutely free, so that the real opinion of the country might be ascertained, Madero acted contrary to the spirit and letter of his promises. In the election of 1911, when Maderista candidates were placed at the bottom of the poll, methods were employed which resulted in their sitting in Congress instead of the men for whom the electors had cast a majority of votes. The situation that has arisen in Mexico is a disagreeable proof of the almost total incapacity of the Mexican people for representative constitution, and of the smallness of the advance that has been made by them after almost a century of independence.

Señor Madero, like a great European sovereign, is said to have had recourse to spiritualism, in his endeavours to find light and guidance through the difficulties that surrounded him. Whether the spirits, or, as some say, his brother Gustavo, advised repressive action, the President very soon was adopting the very same methods of government which he had condemned in General Porfirio Diaz.

The more closely the existing conditions of Mexico are studied, and the aims and projects of the opponents of the Government now in office are considered, the deeper becomes the conviction that personal ambitions and the desire for power or plunder are the mainsprings of action rather than any wish really to benefit the country. The prosperity of Mexico was built up almost entirely by foreign enterprise and capital, mainly American and British. During the Madero regime there were abundant indications that the group which then controlled the country looked with jealous eye on the

activities of the foreigner. While the wise and far-seeing policy of Porfirio Diaz had offered encouragement and support to the men who were building up Mexico, the Maderistas magnified difficulties and raised obstacles which hampered the exploitation of existing enterprises and opposed the opening up of fresh opportunities for the employment of capital. General Felix Diaz and General Reyes, the leaders of the opposition to the Maderistas, saw where this policy tended, and it was with the object of saving Mexico from financial and industrial ruin that they organized the movement which led to the overthrow of President Madero.

General Reyes is dead, having lost his life in the Revolution of February, and General Felix Diaz is a fugitive from his country, but in the end the policy which they represent is certain to prevail. It is only necessary to watch the proceedings of the Maderista leaders and their followers to see with which party the best interests of Mexicans and foreigners alike are bound up. The Maderistas are engaged in a purely destructive campaign. In the Northern States, where they hold sway, towns and villages and haciendas are held to ransom. Industry is subjected to levies which compel them to shut down; railways are torn up and destroyed, rolling stock burned and communications interrupted, yet when mines and factories and power companies propose to shut down their works because of the conditions which render it impossible for them to be carried on, Señor Carranza, the rebel leader, threatens to make the cessation of work a felony, for the simple reason that such a course would put an end to the levy of blackmail.

This is what the much vaunted Madero policy of social reform has now come to. On paper and in the mouths of the late President and his friends their schemes of reform appeared to possess many attractive features, and enlisted a great deal of sympathy in the United States and other foreign

countries. In actual practice these proposals became the negation of all progress, and tended fast towards absolute anarchy.

The methods by which they were put an end to may not commend themselves to British opinion, but the conditions of Mexico, and its primitive and uneducated populace, must be taken into account. The ideas of government held by the mass of the people have not changed greatly since the days of the Aztec rulers. Then the whole legislative power was centred in the sovereign, and this system was perpetuated by the Spanish conquerors. Under the Spanish Viceroys, the representative of the King of Spain wielded absolute power, and governed according to his own will. When the yoke of Spain was thrown off and Mexico became a Republic, the system of government was a despotism under the guise of constitutionalism. It was on a par with that of the other Latin-American republics, whose methods of administration were once described by a cynical writer as "anarchy tempered by revolution." In these conditions legislation and administration became, as Prescott wrote seventy years ago in *The Conquest of Mexico*, "stamped with the severity, even ferocity, which marks rude peoples, hardened by familiarity with the scenes of blood, and relying on physical instead of moral means for the correction of evil."

These words are equally applicable to the Republic to-day. The horrors which took place in the capital during the recent revolution, the almost daily atrocities of the rebels, culminating in such frightful incidents as occurred in Morelos in May, where the Zapatas dynamited a passenger train near Napulata and shot all survivors of the wreck to the number of one hundred and thirty-five, and the slaughter of two hundred inoffensive Chinese coolies in one of the Northern mining camps by order of Gustavo Madero during his brother's Presidency, could only happen in a country

where the inhabitants are still in a rude stage of civilization. These deplorable events are, it is to be hoped, merely a temporary recrudescence of past evils, the result of the lax rule of the Madero Administration, and the unsettled conditions created by the successful revolution against President Porfirio Diaz. For nearly thirty years that ruler gave the country peace, and life and property were as secure in Mexico as in Scotland. It only needs the personal rule of a strong man of the same type at the head of affairs to restore peace and order again in the Republic. Nearly the whole body of foreign residents in Mexico, and probably a majority of the Mexicans themselves, believe that such a man will be found in General Felix Diaz.

The author last summer spent an afternoon with the General, and came away strongly impressed by the conviction that he possesses many of the qualities requisite for the task of ruling Mexico. He is a young man, still under forty, possessed of great force of character and a strong will, and with a breadth of view and statesmanlike grasp of affairs which promises well for the future of the Republic, should its fate ever be placed in his hands, though just now that probability seems somewhat remote. One of the strongest traits in his character is his evident capacity to wait patiently for his opportunity. When it comes, he will be all the more likely to seize it with energy and vigour. This was clearly shown by his action in the recent revolution, and during the almost equally serious situation created in June last, when Congress refused to decree an early Presidential election for the termination of the existing system of provisional government. At the time that ill-considered step was taken General Diaz had it in his power to execute a *coup d'état*, overthrow Congress, and establish himself in supreme authority. With a disregard of personal aims and a patriotism rare in this land of selfish personal ambition, he withdrew for the time being his candidature for the Presidency, and

stepped back, so far as his commanding personality permits into the ranks of private citizenship. It was an unexpected course in a country where every politician who rises even a little above his fellows rarely errs on the side of moderation.

These remarks must not be taken as a prediction that the new Diaz regime when it arrives, if it ever does arrive, would be marked by a slavish adherence to the finest models of constitutional government. Mexico is one of the last countries in the world where the axiom "Vox populi, vox Dei" would be accepted. Its people know little or nothing of the real meaning of representative institutions. They like to feel the strong hand of a personal ruler over them, and if it only be strong enough and reaches down through every stratum of the social fabric, it will be obeyed, and the country will again go steadily forward in the paths of progress and peaceful development; and Mexico will advance another stage towards the goal of real Constitutional Republicanism.

The attitude of the United States, Mexico's nearest great neighbour, is a disturbing factor in the situation. A certain amount of mystery shrouds the policy of the Northern Republic. Her refusal to recognize the Huerta Government after the European nations had granted recognition has produced a disagreeable impression. One result is that every Mexican with a spark of patriotic feeling regards the United States with suspicion and a lurking fear that that country harbours ulterior designs against the sister Republic. This suspicion has been increased rather than lessened by the attempt which, it is rumoured, President Wilson's Administration has made to make Mexico pay for recognition. It is difficult to ascertain the extent to which this rumour is justified, if it be justified at all, but at all events it is very current in Mexico, and has provoked a bitter feeling. Mexicans do not hesitate to hint pretty broadly that they would regard an attempt on the part of the United States to secure

special advantages in return for recognition as savouring somewhat of international blackmail. It is an ugly word, but it is frequently used, and the historian is bound to place it on record.

There is undoubtedly a section of Americans in Texas and other States who are openly trafficking with the rebels in the Northern Mexican States. The action of certain Federal authorities of the United States in handing over the Mexican mails to the rebels shows that this partiality is not confined to the non-official classes. The United States postal officials on the frontier were perfectly aware of the character of the men to whom they delivered the mail bags. They knew that they were robbers and bandits, and the fact that the rebels, the moment they got possession of the mail, proceeded to search the letters for money or negotiable securities and then burnt the whole pile of several hundred sacks of correspondence, is a sufficient indication of the character of the people whom a section of the inhabitants of the United States wishes to see recognized as the Government of Mexico.

This incident, which occurred in May 1913, caused a very unpleasant sensation in Mexico, not only among Mexicans, but in an even greater degree among foreign residents in the Republic, whose letters formed the bulk of the destroyed correspondence. The impression thus created does not tend to make matters pleasanter for foreigners in the Republic, especially English-speaking foreigners, because, unfortunately, every English-speaking person is classed as a " Gringo " in Mexico. The anti-foreign sentiments which were encouraged by the Maderistas have not yet disappeared, although they have considerably lessened. But of all nationalities this feeling applies least to the British. Indeed, at the present time in Mexico, English people are popular favourites. Mexicans believe that the British are absolutely disinterested so far as the Republic is concerned, and that the enterprises which

they undertake have no other object than to secure a fair return for the capital invested. It is otherwise, at all events for the moment, with regard to Americans, and the least that can be said is that at the present time people from the Northern Republic are regarded throughout the greater part of Mexico with feelings which vary from suspicion to dislike, and even positive hatred.

There is this to be said, however, that although the Americans are regarded with feelings of this kind, no hostile act, with one or two possible exceptions, towards them has been reported in any district under the control of General Huerta. The only districts in which Americans have been injured, either in their property or their person, has been in those parts of the country where the rebels are in power. There, although the United States has undoubtedly shown partiality towards the opponents of the Huerta Government, American properties have been forced to pay ransom, and there have been reports of several instances in which United States subjects resident in the Northern States have been killed or wounded.

If the internal conditions of the Republic were estimated solely from the statements that appear in United States and Mexican newspapers, the traveller would be justified in regarding it as unsafe to venture outside the boundaries of the capital. He might even have grave doubts as to his personal security within the very shadow of the National Palace.

During the months of April, May, and June the author travelled over a very large part of Mexico, and visited practically every State except Sonora, Coahuila, and Chihuahua in the North. These were omitted for the sufficient reason that railway communication was interrupted between Mexico City and the United States border, and there was no time to undertake the long journeys, which would have entailed travelling many hundreds of miles on horseback. Outside these States

no evidence of organized revolt was visible. Here and there stories were told of robbery and pillage; haciendas and villages had been raided, cattle, horses and other property carried off, and men were shot and women outraged. But the perpetrators of these misdeeds were not rebels in the ordinary meaning of that term. They were Mexicans who had taken advantage of the prevailing unrest and disorder, and of the absence of regular troops, who were concentrated in the disturbed districts, and had taken to the road as bandits. It must not be forgotten that in Mexico there are a large number of men whose traditions and instincts lead them to prefer the life of robbers and highwaymen to that of honest labour. During the Diaz regime this class was treated with such ruthless vigour that the game became too risky to pursue. The commotions of the last three years opened up a new opportunity, and the robbers have joyfully returned to their old trade. Every gang of these scoundrels is dignified in the newspapers with the name of rebel, when their only object is to possess themselves of their neighbours' property without paying for it. The only portion of the country in which actual rebellion could at that time be said to exist was in the Northern States already mentioned. There the Maderista influence was always strong, and large sums of Government money were spent by the late President in financing General Carranza, one of his chief supporters, and in purchasing arms for the adherents of the Madero cause.

Besides this, the rebels have plenty of sympathizers on the Texas side of the frontier, who are anxious to earn a more or less honest dollar in providing supplies and ammunition to Carranza and his hordes so long as there is money to pay for them. But even in the North the Federal troops made considerable headway all through the summer, and broke up many of the rebel bands. Unfortunately, the character of the country often enabled the bands to escape pursuit and facilitated their

raids against defenceless villages and towns. In the mountainous, thinly populated parts of the country it was easy for a few men to avoid the regular soldiers, dynamite the bridges, and destroy the railways.

As for the so-called revolts in the central and southern part of the Republic, they have little or no political significance. They are merely isolated instances where small groups of discontented peons, rarely more than a hundred in number, and mostly far less than that, having obtained arms by some means, set out on a course of plunder and robbery. The only exception to this description is the State of Morelos, where a bandit named Zapata has held the country in terror for three or four years. During the agitation against President Diaz, Zapata was an ardent Maderista, and carried on an extensive business as a robber under that flag. When Señor de la Barra was Provisional President at the close of the Diaz regime, he directed General Huerta, then commander-in-chief of the Army, to put an end to Zapata's career. But Señor Madero, although at that time not elected to the Presidency, practically controlled the Administration and prevented the execution of the command. Zapata had been useful to him in his rebellion against Diaz, and so General Huerta was called off, and the bandit was allowed to continue his usual course. When Madero became President he secured Zapata's comparative good conduct by a liberal subsidy.

When the Madero regime came to an end and the subsidy ceased, Señor Zapata resumed his old trade. He was so powerful, and had such a large and well-armed following, that the Governor of Morelos and the local Legislature were practically powerless. Indeed, they are said to have connived at Zapata's proceedings. So grave became this aspect of the affair that about the middle of May General Huerta's Government took the extraordinary step of arresting the Governor and the whole Legislative Assembly of Morelos, and they

were brought to the capital for safe keeping. Some ultra-sensitive constitutionalists were inclined to discuss the legality of so complete an interference with State rights as the arrest of the Governor and the whole Legislature. But desperate cases need desperate remedies, and Mexico, since the days of Cortes, has been so accustomed to seeing one strong man, or a group of strong men, doing just what seemed good and right to them, that public opinion was not very greatly moved over the detention of the Legislators of a small State in the Union, and the incident was practically forgotten inside a week.

After the arrests large bodies of Federal troops were drafted into Morelos, and Zapata's followers were defeated in a number of skirmishes. Sinister statements were made as to the reasons for Zapata being allowed by the Madero Government to carry on his campaign of plunder with impunity. Morelos is a great sugar-producing district, and it is stated in so many words by responsible persons in Mexico City that a number of influential individuals, connected directly or indirectly with the Madero Administration, were desirous that the owners of the big sugar haciendas should eventually be driven to sell their property at a ruinous loss to the advantage of these same influential gentlemen, who intended to buy them and then have the Government forces used to settle with Señor Zapata.

One satisfactory feature of the situation in Mexico during the summer was the readiness of the Government to afford protection to foreign enterprises, a marked contrast to the policy of the late Administration, by whom they were hampered and even menaced. Troops, so far as they were available, have always been provided to guard threatened railways, mines, factories, or power stations, and the general conduct of the Administration shows that General Huerta and his Government fully recognize that the prosperity of Mexico is

based on foreign capital and enterprise, and they have adopted the Diaz policy of offering these interests every possible encouragement and protection. The chief difficulties which the Government has encountered in its effort for the pacification of the country have arisen from two causes: first, a lack of funds; and secondly, the smallness of the Federal Army, and to some extent the unreliable character of the material of which it was composed. As already mentioned, President Madero, during his brief term of office, depleted the national finances, squandering about 160 million pesos in fifteen months, and leaving his successors with an empty treasury. Even in Mexico troops cannot be kept in the field without money. If financial resources had been available in sufficient amount during the early summer the suppression of the revolt in the north and the robbery under arms in the south would have been speedily accomplished.

The Government, in the endeavour to attract a better class of recruit to the army, raised the soldiers' pay to 3s. a day, and this undoubtedly has had considerable effect in securing a better class of men. During the month of June recruits were voluntarily enlisted in Mexico City at the rate of from four hundred to six hundred per week, a thing hitherto almost unknown.

One of the chief causes of the political troubles in Mexico has been due to the fact that the country never had an adequate and properly trained army, even for police purposes, which could be relied upon by the Government of the day.

General Diaz succeeded better in this respect than any other Mexican ruler, but he cut the Army down to less than 30,000 men, a force entirely inadequate, once his strong hand was removed, to hold in check a turbulent nation of fifteen millions of people. It was only the tremendous personal influence and power of Porfirio Diaz which kept the

peace. It is not easy to raise in Mexico an army imbued with patriotic instincts. Patriotism is a virtue but indifferently understood in the Republic, and the idea of personal service to the State, except in well-paid civil appointments, appears to be repugnant to most Mexicans. One instance will suffice to indicate the extent to which the average better-class Mexican is prepared to bear arms. During the summer, after much flourishing of trumpets and perfervid speeches breathing the very spirit of patriotism, it was decided to raise in Mexico City a volunteer corps to assist the Government. Some 500 men enrolled themselves in this corps, but they made the express stipulation that they were only to be called upon for service in the city itself, and that only in the event of foreign invasion, a contingency which at that period seemed very unlikely to arise. Since then these careful patriots have been swaggering about the clubs and cantinas (public-houses) giving themselves as many airs as if they had saved the Republic upon a " stricken field."

An interesting suggestion for providing a trustworthy military force was made by Señor Ambrose Sala in the important pamphlet he published on the agrarian question in July 1912. Señor Sala's suggestion was that the State should purchase estates from the large landed proprietors, and break these up into small holdings, which should be given to peons, on condition that they rendered military service to the State—a condition somewhat analogous to that which prevailed in the feudal times in European countries, when the retainers of the great nobles were allowed to use their lands on practically similar conditions.

According to this scheme, the peasants of the country would constitute the Army, and would at the same time be both farmers and soldiers. Señor Sala suggested that these men should be trained in the use of arms, and they should be liable for service either as soldiers or farmers according as their

military superiors might decide. There would be a highly trained staff composed partly of military men and partly of men whose duty it would be to undertake the direction of agriculture and engineering works generally. The peasant owners would be liable for service in any part of the Republic, either for military duty or for employment on engineering or other works. It was also proposed that they might be drafted into districts where private enterprises were being carried out which would tend to the benefit of the country as a whole, and their labour loaned to the contractors on adequate rates of payment, provided always that the pay should never be less than one peso per day. The pay of the soldier-workman would be distributed in certain proportions—twenty-five cents per day would be paid in cash to the workman for his personal requirements, a similar amount would be deducted for food and other necessaries supplied, and the balance would be set aside for the establishment of a fund out of which the cost of providing houses, agricultural machinery, seeds, furniture, domestic animals, and other requirements on the farms would be provided. In this way the whole of the small holders in the country would be organized into an agricultural military corps, each man of which would have a personal stake in the country, and would feel himself interested in the maintenance of stable conditions and good government.

It is possible that the adoption of this scheme would lead to more settled and responsible conditions among the mass of the Mexican people, but it is of a very Utopian character, and the prospect of its realization is very remote. The system suggested would undoubtedly provide a large number of at least partially trained men, and the economical training which it was proposed should accompany the military work would produce a large body of practical agriculturists, whose operations would be of vast benefit to the community.

CHAPTER VIII

RESOURCES

Industrial resources — Mineral and agricultural wealth — Economic developments—Factors towards prosperity—Utilization of water power

THAT Mexico is a country which offers a favourable field for the employment of capital, and affords an outlet for energy and enterprise in every direction, is admitted by everyone who has visited it. The natural resources of the Republic are practically inexhaustible. The climate over a large portion of its whole area is well-nigh perfect, and everywhere, except in certain portions of the Tierra Caliente, white men can live and work in health and comfort. All that is required to make Mexico one of the richest and most prosperous countries on the globe is the establishment of stable internal conditions and adequate protection for enterprises financed by foreign capital. This is an essential condition for the development of the country.

Mexico is still a comparatively poor State, and for a long time to come must depend on external sources for capital with which to develop her resources. The present Government holds as one of the cardinal features of its policy "full protection for foreign enterprise." Señor Licentiado Don Rudolfo Reyes, who was for a time Minister of Justice in the Huerta Cabinet, in a public statement used the following words: "The special idea and policy of the Government is full protection for foreign enterprise, but we are opposed to the establishment of monopolies. The enterprises that will be

welcomed with special satisfaction are those relating to railways and other means of communication, the exploitation of the oilfields of the Republic, and the development of agricultural resources."

The opportunities which agriculture in all its branches opens up would seem to offer attractions superior to almost any other for the employment of capital, but hitherto attention has been very little directed towards it. Cattle-raising in Mexico is altogether outside the speculative stage, and produces large and immediate profits. There is an immense market for stock of all kinds, and some of the largest fortunes of Mexico have been made in breeding cattle, horses, and mules. Goat-farming is a veritable gold-mine. The flesh of these animals is a favourite article of diet with the masses of the Mexican people, when they can procure it, and the demand for it is very large. According to statements made by men engaged in this industry, the skins of the animals alone more than cover all expenses, and profits up to 100 per cent and over can be realized with ordinary care and supervision.

Even the disturbed internal conditions have not been sufficient to check enterprising capitalists from investing large sums of money in this industry. The writer is aware that in June 1913, at a time when the revolution was in full progress, two American gentlemen bought a ranch of 20,000 acres in the State of Vera Cruz, which they stocked with 50,000 goats, and they expressed their confidence that, whatever happened, they were certain to get back the whole of the capital expended on both land and stock, together with substantial interest, in three or four years.

Fruit-growing pays remarkably well. There is one large banana plantation on the River Tonto in Oaxaca which has paid 20 per cent during the last three years, despite all the trouble and unrest that has prevailed, and although many car-loads of fruit were lost owing to the delays in railway

transit arising out of the disturbed conditions. Yet the first bananas on this plantation were only planted in November 1908. During the height of the season twenty tons of bananas are shipped daily to Mexico City, and the demand far exceeds the supply.

At Medina, on the railway line from Vera Cruz to Santa Lucretia, there are extensive plantations of citrus fruits and pineapples, where the planters are also reaping big profits. One of them realized £150 per acre from ten acres of pineapples; and oranges, grape-fruit, and limes in the same district are almost equally profitable. Developments in this area, however, have been somewhat checked by the advice given by President Wilson recommending all Americans to leave the Republic and return to the United States. A number of the planters have followed this advice, and have abandoned, temporarily at all events, the farms which they had under cultivation. Practically speaking, there is no vegetable product of either temperate or tropical lands but can be produced in luxuriance in Mexico. The country possesses every variety of climate, from the burning tropics right up to the everlasting snow. There is a good rainfall over the whole country with the exception of three Northern States, where the arid, semi-desert conditions of Texas and Arizona extend southward across the Mexican border. There is also a narrow strip along the Pacific coast where the rainfall is scanty. But even in these districts there is sufficient water for irrigation purposes flowing down from the mountains, and with the application of moisture even the most arid tracts teem with fertility.

To give a list of the crops that can be grown in Mexico would be to mention the whole range of agricultural product. Suffice it to say that wheat, maize, rubber, coffee, sugar, bananas, all the citrus fruits, grapes, thrive perfectly and produce heavy crops. Fibre plants, such as cotton, hemp, sisal, and jute, do exceedingly well; while vanilla, cacao

(chocolate), and cocoanuts are indigenous to the hot country along the coast. The cocoanut palm is supposed to flourish only near the sea breezes, but trees laden with fruit can be seen growing at Rincon Antonio on the isthmus of Tehuantepec, nearly 100 miles from the ocean.

The forests are filled with trees which produce exquisitely beautiful timber for cabinet-making. In the Tierra Caliente over forty varieties of cabinet woods are known, and dye woods and plants exist everywhere. It is pitiful in the States of Vera Cruz and Oaxaca, when the jungle is being cleared for banana or other plantations, to see magnificent Chico Sapote, mahogany, and rosewood trees felled and burnt on the ground as rubbish. The absence of adequate railway facilities and the distances from the coast render it impossible to convey this timber profitably to a shipping port. There are plenty of streams and rivers in these States, but many of the finest timber trees have wood so dense and heavy that they will not float, and there is no other available means of transportation.

It is hardly necessary to refer at any length to the mineral resources of Mexico. Humboldt, the great geologist, was not using the language of exaggeration when he described the country as " The World's Treasure House." An extraordinary variety of metals is found in the mountains of Mexico. Gold, silver, copper, lead, mercury, tin, and zinc exist in large quantities, and also many of the rarer metals, and fabulous wealth has been acquired from their exploitation. According to the opinion of competent mining engineers, the mineral resources of the Republic have only been scratched, and rich mines await discovery in all directions as soon as railways or other facilities for transit are provided for the transport of the ores and machinery. Coal has also been found in many localities, though in most cases its quality and the nature of the deposits do not enable it to be worked profitably; but

until the outbreak of the present trouble mines were being successfully exploited in Coahuila and one or two other of the Northern States.

Oilfields of enormous extent and productiveness have been recently discovered at various points in the Gulf States, and fresh discoveries are constantly being made. It would seem as if the deposits of this valuable mineral in the Republic were practically inexhaustible. In the Tampico district of Vera Cruz one well sunk on the property of the Eagle Oil Company has been producing oil at the rate of 100,000 barrels a day for many months, and its productiveness shows no sign of diminishing. When the bore-hole at this well pierced the oil-bearing strata, the pressure was so enormous that the oil gushed out over 100 feet in the air, and the flow was so great that the engineers found the utmost difficulty in controlling it. The extraordinary mineral riches of Mexico have in some measure obscured the other resources of the country. For at least three centuries men sought only for gold and silver, and neglected many other more certain, if less alluring, sources of wealth. The value of the minerals extracted from the mountains of Mexico is incalculable. At the beginning of the last century Humboldt estimated that at least 3000 metalliferous mines were being worked, and the number since has been greatly increased.

The mining region extends from Sonora to Oaxaca, a distance of 1600 miles, and has an average width of about 250 miles. Throughout this great district gold, silver, and copper are found nearly everywhere, but the richest mines have been discovered on the mountain slopes between 3000 and 8000 feet above sea-level. Most of the famous historical mines are situated here, and some of them have been in operation since 1526, immediately after the Spanish occupation. Although Mexico has been settled by Europeans since 1523, its area is so vast, and is in many places so difficult of access, owing to the absence

of roads and the existence of dense jungles and forests, that many districts have never been explored or prospected.

Mexico is the largest producer of silver in the world, and comes fifth in its output of gold. For some years the amount of this metal produced has steadily increased, and the Republic promises eventually to become one of the principal sources of gold supply. The industrial metals, such as iron, copper, lead, zinc, and mercury are found in great abundance, and a large number of mines are being profitably worked. Among the other metals which have been mined are tin, antimony, manganese, graphite, vanadium, and bismuth. As already mentioned, the recent unsettled conditions in the northern portion of the Republic have checked the mining industry to a considerable extent, and a number of mines and smelters, mostly owned by Americans, have found it necessary to cease operating. This check, however, is only temporary, and its causes will be removed as soon as the Government has succeeded in re-establishing order.

Another important field for the employment of capital is the development of the immense water power available on the streams and rivers. Most of the rivers of the country have their origin in the central plateau, and the descent from it to the lowlands along the coast is nearly everywhere very abrupt. In many places there is a difference of 6000 or 7000 feet in altitude within a distance of 8 or 10 miles. The rivers, fed by melting snows and tropical rains, rush down the precipices to the sea, forming magnificent waterfalls on the way. Some of these cataracts are of stupendous height, as at Necaxa, where the river of that name in less than half a mile hurls its waters down a height of over 1600 feet. The greater part of this tremendous drop is accomplished in two perpendicular falls. The upper fall is 460 feet in height, and the lower 740. Between the two falls the river flows through a great gorge for about 600 yards over a series of cascades and rapids which

lower its waters an additional 400 feet. It is obvious that these huge falls, which dwarf Niagara in height, provide an enormous amount of power. To British enterprise and capital must be given the credit of utilizing the energy that was running to waste. Two companies are mainly concerned in this work. One of these, the Mexican Light & Power Co., registered in Toronto, Canada, but with its financial and administrative centre in London, has installed plant capable of developing 132,000 horse-power. It lights the city of Mexico, propels its tramways, and drives the machinery of its factories, and it supplies the mines at El Oro with light and power, although these are nearly 200 miles away from the falls. It pumps waters for a great irrigation scheme in the Valley of Mexico, crushes ore at Pachuca, 80 miles away, and does a hundred other things with the current generated at the Falls of Necaxa.

The other enterprise is carried on by the Puebla Light & Power Company, which also has its headquarters in London. It utilizes the power of the waterfalls in the Puebla district on the Atoyac River and on the Rio Blanco at Orizaba, and is at present producing about 50,000 horse-power. It supplies electric energy to drive the machinery of the cotton factories and mills of Puebla, which has been called the Manchester of Mexico. It lights that city, and also supplies light and power to the city of Orizaba. Additional plant is now being erected about four miles from the latter city, from which a transmission line will be run to supply Vera Cruz, ninety miles away, with light and power for all the multitudinous requirements of that busy city, the leading port in Mexico.

These two power companies are by far the most important enterprises of the kind in Mexico, and their success is a great tribute to British enterprise. The scope for development in the areas which they supply with current is enormous, and year by year their business and revenue are bound to increase.

PUEBLA, STREET SCENE

One of the peculiar features of the development of Mexican resources is the manner in which particular nationalities have devoted themselves to special lines of work. The English have been the great builders of railways and harbours, and they largely control the electric power plants and oil production. To this day, though other nations have come in and the Mexican Government has taken over a large amount of the mileage into its own hands, the railway language is English, and practically every driver and guard—and, of course, all the higher officials—are English speakers.

The Americans have interested themselves mainly in mining, though in recent years they have begun to engage in the utilization of water power and in agriculture on a large scale, while the Standard Oil Company, through one of its subsidiary organizations, has acquired a considerable area of the oil-bearing lands.

The hardware trade, apart from mining and textile machinery, which is mainly American and British, is almost entirely in the hands of Germans. Frenchmen are supreme in the drapery and dry goods businesses, and control some of the largest cotton mills in the country, while the grocery and provision trades, and most of the cantinas (public-houses) are in the hands of Spaniards, who have also begun to take an interest in cotton spinning.

This is, of course, only a broad generalization. There are men of all nations engaged in these various spheres of activity, but control of the trade or enterprise in each case is generally as indicated. The remarkable thing is that the native Mexicans rarely engage in business. They are agriculturists, and occasionally mine owners,—this refers, of course, only to the well-to-do classes,—but they are hardly ever traders or the managers of industrial enterprises. The Mexican usually seeks to enter one of the professions, Law, Medicine, or Engineering, and uses the one chosen as a stepping-stone to politics. A military

career does not often appeal to him, though it too opens the door to the highest positions in the Government. The successful General is usually a soldier of fortune who carves his way with his sword to the eminence of the Presidential chair from very humble beginnings.

In examining the industrial and commercial prospects of Mexico, it is obvious that the future of the country must depend upon four factors. These are mining, oil production, agriculture, and the development of the available water power for the production of electricity. No country in the world is better dowered in all these respects. The wealth of her mines is incalculable. Her oilfields, so far as present indications go, are amongst the richest yet discovered. The agricultural resources are inexhaustible, and not even Switzerland, with her glacier-fed streams, can surpass Mexico in the extent of water power available for conversion into what someone has romantically termed "white coal." Nature apparently has denied Mexico a sufficient stock of coal for industrial purposes, but if she has been a niggard in this respect, she has supplied with lavish hand those substitutes to which, even in countries with inexhaustible coal seams, engineers are turning as more convenient and economic sources of energy. People have accustomed themselves to speak of periods in the world's history by the name of some widely used material. Thus, there has been the Stone Age, the Bronze Age, the Iron and Steel and Coal Age, and now the world is said to be entering upon the Age of Oil. Mexico has had but a very exiguous share in some of these, but, unless every prospect is falsified, she will have an abundant participation in that which is now opening up.

It is barely a decade since oil began to be exploited in the country, but already the Republic ranks amongst the largest producers in the world. The possibilities in this direction are difficult to overestimate. The whole of the

Gulf coast appears to be one continuous oilfield from the Rio Grande to the frontiers of Guatemala. But whether the oil era be long or short, Mexico will still have enormous sources of power available in her streams and rivers for the uses of industry and manufacture so long as the sun shines and the winds waft moisture-laden clouds to be condensed upon the mountains. Hitherto the Republic has not been a manufacturing or even an agricultural country, in the ordinary sense of these words. It is less than a dozen years since the first hydro-electric plant was set up, and the exploitation of oil is still more recent. Now, from both these sources hundreds of thousands of horse-power are being derived to drive the machinery of mines and factories, which, in the absence of coal, would never have had existence.

There are two typical electrical undertakings connected with the development of electrical water power. One of these is situated at Necaxa, controlled by the Mexican Light & Power Company. The other is known as the Puebla Light & Power Company, to both of which reference has already been made. The development of the water power of Necaxa entailed the carrying out of one of the largest engineering enterprises in Mexico. The work of surveying and levelling and the preliminary constructions, such as building roads and railways, erecting dwellings for the workmen and engineering staff, arranging a water supply and sanitation, in itself constituted a formidable undertaking. Besides this, the town of Necaxa, which stood in a valley on the site of the first reservoir, had to be removed bodily to higher ground on the western side of the river. The first dam constructed in connexion with the development was that on the Necaxa River immediately above the famous falls. Here, just where the "mesa" (tableland) juts out from the mountain-side, a vast embankment was thrown across the gorge at its narrowest point. Above this the valley opens out considerably, so

that a comparatively short dam holds back a very large quantity of water.

The Necaxa Dam is 177 feet high, 1300 feet long at the crest, and 970 wide at the base. Through its centre, rising as high as the level of the spillways and going down to bed-rock, runs a masonry core 12 feet thick and grouted in with cement so as to be absolutely water-tight. "Toes" of masonry were built up on the inner and outer faces of the dam, and the space between each "toe" and the central core was filled up by earth washed in from the hill-side. This earth consists of volcanic mud, containing a large quantity of basaltic fragments, and was poured out in past ages by volcanoes long since extinct. The deposit, which underlies vast areas of Mexico, is locally known as "tepatate." It sets as hard almost as cement, and, being impermeable to water, makes an ideal filling for dams. Nearly two million cubic metres of this material were used in the construction of the Necaxa Dam, and the method by which it was carried into position was a marvel of cheapness, rapidity, and efficiency. What engineers term a "sluicing ditch" was constructed along the mountain-side from near Huachinango to the dam, a distance of about eleven miles. Here, with a head of several hundred feet, the water was led into a pipe, and issuing at the lower end under great pressure washed the tepatate into a conduit laid on scaffolding, which carried it behind the masonry toes. There the solid material was deposited while the water flowed into the dam.

As it now stands, the Necaxa Dam is the highest earth-work dam in the world, surpassing by 77 feet in that dimension, though of course not equalling in extent, the celebrated Gatun Dam on the Panama Canal. About a couple of miles distant on the Tenango River is the largest of the dams yet completed, but it will be surpassed in extent when that projected dam at Almoloyan is built. The vast

embankment which retains the waters of the Tenango and the floods brought in by the canals that carry the flow of the tributaries, that formerly entered the Necaxa below the falls, is 3½ kilometres long, and in the centre of the channel of the Tenango River rises to a height of over 157 feet. It is a magnificent piece of engineering construction, and looks more like a symmetrical mountain ridge lying across the valley than the work of mere human hands. The system of diverting dams, by which the waters of the streams lying to the west are captured and conveyed to Tenango, is one of great interest. Beginning with the Rio Laxalpam, nine large streams and a number of smaller ones are cut across by a line of dams and canals, which collect their waters into one great conduit that finally empties itself into the Tenango reservoir.

Twenty-six different tunnels, aggregating 31 kilometres in length, had to be pierced through the hills lying across the line of the canal. If one placed both hands together flat on the table, with the fingers separated, and imagined the backs of the hands to be the hills, and the spaces between the fingers to be the valleys down which the rivers flow, it will give some idea of the formation of the country. Then if one can fancy a tube passing through the fingers at the first joint of each, and terminating at the side of the left hand in a big saucer, the reader will be able to form some conception of the principles on which the great scheme of water conservation has been planned and carried into effect.

At present only a little more than half the annual flow of the streams will be required for the purposes of the Company, but later on, when the requirements of Mexico City and the mining districts grow, as they are doing rapidly, then the great projected dam at Almoloyan will be built, and one hundred and eleven million cubic metres more water will be impounded and made available for work. The discharge pipes

from the Tenango reservoir are so arranged that its waters can be sent either direct to the Necaxa power-house, or the surplus diverted to increase the supply in the Necaxa reservoir should the rainfall in its own river basin not be sufficient to fill that dam.

Neither the harnessing of Niagara Falls, the world's most spectacular electric power station, nor of the Victoria Falls on the Zambezi, in South Africa, presented anything comparable with the problems presented to Dr. F. S. Pearson, the consulting engineer, and his assistants, who carried out the works at Necaxa. At Niagara and on the Zambezi there was an ample water supply at hand, and all that was required was to erect the machinery and open the sluices. Here at Necaxa the country had not even been surveyed or mapped, and there were no roads by which machinery or materials could be carried to the spot. Everything had to be done from the very beginnings. For nearly ten years an army averaging 5000 workmen, with scores of skilled engineers as officers, has been continuously employed.

All these men had to be fed and supplied, exactly like an army in the field, for the district in which they were employed produced very little for their sustenance, and a sanitary and medical corps organized on military lines. The labourers were all Mexicans, but the engineers in charge were drawn from many countries, though Englishmen and Americans predominated.

To a Frenchman, Dr. Vaquie, belongs the distinction of first attempting to develop power at Necaxa. He was exploring a remote corner of the State of Puebla when he was one day astounded by the sight of a waterfall of stupendous height, where what is now known as the Necaxa River flung itself over two precipices, which, with the rapids between, lowered the waters 1600 feet, over ten times the height of Niagara, in less than half a mile. It was the height of the

rainy season, and the volume of water pouring down was enormous. The Frenchman fully realized the possibilities of the power running to waste, and he had golden dreams as he stood on the end of the " mesa " and looked down into the tremendous gorge where the turbid waters were thundering and crashing 2000 feet below.

It was too early then to think of transmitting electricity to Mexico City. The " oil switch " and the power to handle currents of high voltage over long distances had not yet been attained, but Dr. Vaquie conceived the idea of building a power-house where the energy of the electric current he proposed to generate would be employed in the manufacture of carbide of calcium and other valuable products, which can only be obtained in the intense heat of the electric furnace. So he hurried to Mexico City, obtained a concession of the water rights from the Government, formed a company, and set about development.

Some £20,000 was expended, but the task was too big for the enterprising Frenchman. Besides, he found that the amount of water going over the falls had seriously diminished. He first saw the falls in the rainy month of June, when a large portion of the annual rainfall of the district is precipitated, and the river was flowing full as the result of the deluges in the hills. Dr. Vaquie saw that it would be necessary to build dams to conserve the rainfall, and he was wise enough to recognize that he was unable to undertake the works or raise the capital that would be necessary. He also saw that there was no possibility of either bringing in the raw materials for his electric factory or getting out the finished product at a profit. Even the engineers who did subsequently develop the power found there was no way in or out of the gorge where the generating station must be built than over the lip of the fall itself.

So when Dr. Pearson appeared on the scene as the representative of a syndicate which had more practical plans in view

than making carbide of calcium in a spot from which it could not be got out, the Frenchman was glad to accept an offer made to purchase the rights of his company. Cheap power and plenty of it was wanted in Mexico, for the country was rapidly developing under the wise, strong rule of General Porfirio Diaz. Improved methods for the economical transmission of electricity over long distances had been discovered, and the syndicate which acquired the water rights of Dr. Vaquie saw the possibility of utilizing the falls of the Necaxa River to advantage. Capital, mainly English and Canadian, was forthcoming.

The problem was to obtain a sufficient flow of water all the year round. A waterfall which provides, say, 200,000 horsepower during the rainy season, and only a small fraction of that during the remainder of the year, is not of much value as a business proposition. Plenty of water flowed down the Necaxa and its tributaries, and the matter resolved itself into the simple question of providing storage to hold sufficient to keep the dynamos producing the required power throughout the year.

The problem was attacked in the most thorough manner. The Mexican Congress was appealed to, and it confirmed the concessions granted by the Government, and ample powers were also obtained from the City of Mexico and the States of Puebla, Hidalgo, Mexico, and Michoacan which fully secure the future of the enterprise. Some small companies operating in the area over which the Mexican Light & Power Company thus secured control, including the Compañia Mexicana de Electricidad, were absorbed on favourable terms, and the gigantic task of building the dams and generating stations was begun. At present six enormous dams and reservoirs have been completed, with the necessary connecting tunnels, and the water from all of them is now available for generating power.

A few short tables will give to those interested in the

undertaking some idea of the extent and nature of the enterprise :—

Reservoirs—	Capacity in Cubic Metres.	
Necaxa	42,941,000	Completed.
Tenango	43,116,000	
Nexapa	15,537,000	
Acatlan	187,000	
Los Reyes	26,110,000	
Laguna	43,526,000	
Almoloyan	111,000,000	projected.
Ayotlan	12,280,000	

Tunnels = 32 : Total length 31·679 kilometres.

Generating Stations (Necaxa system)—	Horse-power Capacity.
Necaxa	89,820
Laguna No. 1	1,000
Laguna No. 2	2,570
Texcapa	2,940
Drainage Canal System (Mexico Valley)—	
Juando	4,160
Elba	6,190
Canada	1,340
San Ildefonso System—	
Fernandez Leal	1,210
Villada	1,210
Chiluca	300
Madin	300
Tlilan	500
Total hydraulic power	111,540 h.p.
Steam plants in Mexico City	15,910
Gas plants in Mexico City	110
Grand total	127,560 h.p.

The power plants on the drainage canal system and at San Ildefonso utilize the water-power rendered available by the great drainage system carried out in the valley of Mexico

some years ago by Messrs. S. Pearson & Sons, and that of certain small falls near Pachuca. The current from these systems is conveyed at 20,000 volts, partly to Mexico City and partly to Pachuca. From the great generating stations on the Necaxa system the current is transmitted at a voltage of 85,000 volts, the distances being :—

	Kilometres.
Necaxa to Mexico City . . .	153·475
Mexico City to El Oro . . .	121·200
San Lorenzo to Pachuca . . .	47·300

The transmission lines are carried in a perfectly straight line through primeval forests, over mountains, and across valleys. The largest span is 1700 feet, and stretches from near the Necaxa power-house to the top of the western side of the river gorge. During construction there were considerable losses owing to thefts of wire by the country people, but since the current was turned on, and several thieves lost their lives, the peons regard the lines with wholesome awe. For a time a favourite amusement in remote localities was shooting at the big insulators. But Congress passed a law making it a capital offence to interfere with electric transmission lines anywhere in the Republic. Several marksmen were captured, convicted, and promptly hanged, and since then the sport has lost much of its charm. Every yard of the lines between Necaxa and El Oro is patrolled daily by a staff of guards, who are expert linesmen. These men, who are well armed and mounted, are quartered in station houses distributed at certain points, and the fact that the lines have never been interrupted says a good deal for their vigilance and efficiency.

On the upper waters of the Necaxa River two very large additional dams are situated at Laguna and Los Reyes. These two dams supply water to the power-houses at the former place, and also to the one at Texcapa. The turbines in the Texcapa power-house work under a head of water of about

AQUEDUCT AT QUERÉTARO, WITH WATER CARRIERS

2000 feet, yet owing to the configuration of the country the stream, after passing through the machinery, flows into the river and down to the Necaxa dam, where it is again available for use. The Laguna waters also flow into the Necaxa. Indeed, most of the available water is already used three times over, and plans have been prepared for the execution of another big power-house below Necaxa, where for the fourth time the same supply can be made to generate power.

For this additional station the water from all the dams and tributary streams in the concessions belonging to the Company will be available, so that the output of current could be practically doubled in just so long as it would take to build the new power-house. This remarkable system of water power has been rendered possible by the extraordinary fall in the level of the land from the high plateau down to the low country in the Tierra Caliente. The alteration in level amounts to fully 6000 feet in a distance of about ten miles. At the Necaxa power-house there is room in the existing generating station for turbines to produce 30,000 additional horse-power. The foundations for these are ready and the pipe connexions made, so that all that is required is to put in the dynamos and turn on the water. The Mexican Light & Power Company is therefore in a very favourable position to meet not only the present wants of its customers, but to provide, at a comparatively small cost, for an enormous increase in the demand for current for either light or power.

The principal power-house of the country, as already indicated, is built in the gorge of the Necaxa River about a quarter of a mile below the great fall. The scene, viewed up the river from near the power-house, is one of impressive magnificence. On the western side of the gorge rises a vast cliff of black basalt to a height of over 2000 feet, straight as a wall, with its crest crowned by a rich tropical growth. For hundreds of feet from the edge of the cliff the rock is covered

with plants which in the rainy season are a mass of bloom. The long aerial roots of the plants hang down like cables halfway to the bottom of the abyss, swaying in the wind.

On the opposite side, equally abrupt and still higher, rises the wall of limestone that holds up the "mesa," on which the offices and residences of the engineering staff are built. The strata of the limestone rock have been tilted up at a tremendous angle, due to the disturbance that occurred when the molten basalt was forced upwards and through them at some remote period.

Across the terrible chasm which the river in the course of untold ages has scooped out between the two geological systems rises the great barrier of basalt over which the Necaxa River used to hurl itself in spume and spray. Its face is 760 feet in height, absolutely perpendicular, and above this gigantic fall on either side the cliffs of the upper gorge rise to an additional height of 1300 feet. This portion of the chasm is older than that below the great fall, and the rock has weathered a good deal, affording a foothold for a luxuriant growth of plant life.

On the extreme point of the "mesa" above the great fall stands a little summer-house, on the rustic seats of which the observer can sit and look down into the lower gorge to a depth of 2400 feet.

At the present time no water, save a trickle from some hidden spring, now passes over the fall, and this disappears in a rainbow-tinted mist long before it reaches the bottom. A warm, steady wind, due to difference in temperature between the upper and the lower valleys, blows for ever up against the face of the sombre beetling rock, and myriads of swallows and other birds haunt the middle height along the front of the fall between the upper gorge and the hot tropical valley below.

As the visitor takes his place in the cage on the lip of the fall for the descent into the gorge—there is no other route—

and gazes down into the nerve-shaking abyss below, the birds seem to be flying close to the ground. But as the cage sinks slowly down, while the unaccustomed voyager holds his breath in terror and dreads to move lest the supporting wire cables should give way, they are seen to be hundreds of feet in the air. Then, after what seems to be hours, though it is really only about ten minutes, the cage touches the ground, and the traveller steps out with a sigh of thankfulness, and gazes upwards in awe at the height from which he has descended.

The engineers in charge of the works regard the thrilling aerial journey as a matter of course; but then they have been going up and down every day for years, and familiarity has made them accustomed to the sensations it produces on a first acquaintance.

That a certain danger is associated with the descent is shown by the number of fatal accidents that have occurred at one time or another since the works were started. The chief risk does not arise from any possible fault in the apparatus by which passengers travel up and down, but from the fall of loose material from the overhanging cliffs. A number of workmen have been killed by rocks and stones falling upon them in the cage in this way as they passed up or down.

The ordinary visitor, when he lands at the bottom of the gorge, is entranced with the beauty and the impressiveness of the scene which rises around him, but the engineers in whose charge the trip is always made are, naturally, more interested in the work which they have accomplished than in the aspect of natural scenery, with which they have long grown familiar. They lead the visitor away down the gorge at once to the power-house, and waste no time in gazing at a mere dry waterfall 800 feet high. These men have harnessed the waters, and they want to show what has been done with them; to point out how they compel the prisoned stream to do work instead of

dashing itself picturesquely in spray over the edge of the precipice.

One of the engineers will probably remark to the visitor that "the fall has been running idle for a few million years, and it was just about time it began to turn a wheel or two." And when one sees what has been accomplished there is not much room for surprise at this attitude. Here, in a handsome building constructed throughout of steel and concrete these men of science and their fellows have set the idle waters to work, and the product of their labours (the engineers call it "the Juice"—Anglice, electricity) lights a great city, turns the wheels of many factories, pumps water, and supplies power for mining machinery nearly two hundred miles away.

The stupendous thing which the river has done just outside the power-house in cutting a great gorge during millions of years of slow erosion is less of a wonder and a miracle than what it is doing now, as its waters foam and roar through the impulse-wheels below the big dynamos that revolve half a dozen times during every tick of a watch.

In the power-house, which is 65 feet high, 214 feet wide, and 265 feet long, eight huge electrical generators are at work, capable, when running at full speed, of producing 94,000 horse-power. These generators are of what is known as the vertical type, and are keyed direct to the shafts of the water-wheels. These latter are horizontal and are 100 inches in diameter. Each one carries 24 steel buckets, against which the water impinges at a pressure of 640 lb. to the square inch. The water is directed against the wheel from two nozzles, one on each side, so that the strain is perfectly balanced. Oil is forced into the bearings of both water-wheels and generators at a pressure of 900 lb. to the square inch, sufficient to keep the entire weight of the machinery floating on a film of lubricant, and so reducing friction to a minimum.

This system of pressure lubrication has an additional

value, in that it acts as an automatic safety valve. If anything goes wrong, such as a sudden breaking of the transmission line or anything that takes the load off the generators, the oil pressure by an ingenious device instantly cuts off the water supply, and prevents the machine from running away. There is practically no vibration ; so little, indeed, that when a silver dollar was placed on edge on the bearing of a generator running at 300 revolutions per minute the coin remained perfectly upright and steady.

The electric current leaves the dynamos at a pressure of 4300 volts and passes to the big transformers, where it is " stepped up " to 85,000 volts, the pressure at which it is sent over the transmission lines to Mexico City and the mining camp at El Oro. Five banks of transformers are used. They are all of the oil and water cooled type, that is, they have oil baths for insulating the switches and water-jackets surrounding them for the purpose of removing the heat that is generated in the process. Each transformer is enclosed in a fireproof masonry compartment with a steel bulkhead. They weigh 24 tons each, and are mounted on trucks carried on rails so as to be easily removed for repair. Every conceivable precaution that foresight and skill can suggest has been adopted to guard against accident, and wherever possible, automatic safety devices have been installed.

The chief trouble that has been experienced, so far as personal risk is concerned, arises from the casual character and carelessness of the Mexicans who are employed for the less skilled work in connexion with the enterprise. It is almost impossible to get these men to realize the danger that exists in dealing with electrical currents with the very high voltage that is employed. They have even been known to crawl into the big four-foot steel tubes which encase the high-pressure conductors, and go to sleep there. More than once they have lost their lives through carelessness of this kind, which is due

to a complete incapacity to realize the danger of electrically charged wires. They are like animals or very young children in that. Nothing seems to teach them caution. The engineers in charge have more trouble in looking after the safety of the workmen than in keeping the machinery in perfect order.

An incident that occurred will serve to illustrate the casual and even callous character of the Mexican employé. On one occasion two brothers were working on the lip of the fall when one of them slipped and was precipitated to the bottom, a depth of 760 feet. His brother calmly went on with his work, and when the engineer-in-charge said to him, " Are you not going down to see what has happened to José," the man replied, " What is the use ? He is dead anyhow ! "

Water is conveyed from the reservoir to a large penstock by three pipes, two of which are 7 feet and one 9 feet in diameter. From the penstock the water is led by nine 30-inch pipes to the turbines. These smaller service pipes are laid in three separate tunnels, each 13 feet by 10, with arched and cemented roofs, driven through the solid rocks for a distance of 3450 feet. The pipes in the tunnels vary in thickness with the pressure they have to sustain. At the top of the slope, where the pressure is low, the metal is comparatively thin, but down in the power-house, where it rises to over 600 lb. to the square inch, the pipes are about an inch in thickness. Running up the side of the gorge at an angle of 80 degrees from the penstock are three great " surge " pipes, which allow the water, if suddenly shut off at the wheels for any reason, to rise, and so prevent any undue increase of pressure in the feed pipes or penstock.

Long-distance transmission of electrical energy is a comparatively recent practice, and was rendered possible by the invention of oil switches and high potential transformers. With the old-fashioned open switches very long arcs were formed when a circuit was opened or closed, with the result that there was always danger of fire or accident. The copper

contacts were frequently burnt and warped or partially melted. By keeping the switches plunged in an oil bath, circuits with voltages up to, or over, 100,000 volts can be closed or opened as easily and as safely as turning on or off an ordinary electric light. This system, as already indicated, is installed at Necaxa.

The actual length of the transmission line from the generating station to the farthest point supplied with current, a mine beyond El Oro, is 196 miles. Pure copper wires half an inch in diameter are used for the conductors, which have a tensile strength of 60 lb. and an elastic limit of 20 metric tons per square inch. The weight of metal used for the lines alone is 2240 tons, and cost over £100,000.

The wires are supported on galvanized steel towers 50 feet high, and designed to resist a wind pressure of 100 miles an hour, a strain never likely to be imposed, as the Mexican plateau is well outside the hurricane belt. Insulators of brown glazed earthenware are used on the towers. These insulators are 14½ inches in diameter and 18 inches in height. Under actual experiment with water sprays they stood an arcing test of 180,000 volts. Private telephones connect all the stations along the line, so that communication is rapid and secure, but to guard against any possible interruption of the telephone system wireless telegraph stations are installed at Necaxa and Mexico City.

The question of wayleaves for the transmission line occasionally gave trouble, as the hacendados (estate owners) sometimes made exorbitant demands for permission to cross their lands. An incident which occurred in this connexion gives an interesting light on the despotic methods pursued by President Diaz.

One of these hacendados refused to accept the 3000 dollars offered by the representative of the company for a right-of-way across a corner of his property. He demanded 30,000, and

when this was refused promptly sued the company in the local court. The presiding judge was his boon companion, and, as is not altogether unusual in Mexico, decided in favour of his friend for the full amount claimed without a moment's hesitation. An appeal to the Supreme Court only resulted in the decree of the lower judge being confirmed, for rich hacendados are men of great influence in Mexico.

Then by some means the story of the lawsuit got to the ears of President Diaz. The old Dictator always had a watchful eye over foreign enterprises in the Republic, because he was aware that these were the main supports of the country's financial stability. So he caused inquiry to be made as to the justice of the hacendado's claim, and the equity of the legal decisions in that gentleman's favour. The report made to the President justified his suspicions, and he invited the members of the Supreme Court to dine with him one evening. After dinner he discussed Government policy with them, especially pointing out that the Government was doing everything in its power to attract foreign capital to Mexico. "When it comes here," he added, "and is employed to develop our resources, we must give it fair play and see that it is protected against unfair attacks. Your decision the other day is calculated to do great harm to the financial interests of the Republic, and I think it might be well if it were reconsidered."

The judges did not like the little lecture, but they took the hint, and on some pretext or other the case was recalled and sent back to the lower court for rehearing. The judge there reduced the original amount to 20,000 dollars, and when the company again refused to pay he directed the transmission lines to be seized and sold by auction. This contumacy was too much for President Diaz, who sent a curt order that the price of the wayleave across the hacendado's estate should be fixed at 3000 dollars, the sum offered by the company. The judge was wise enough to know when the old President was in

earnest, and he very promptly recalled his previous judgments and gave a third one as ordered. These " legal " proceedings are interesting as giving a glimpse of judicial methods in Mexico, and of the great power exercised by General Diaz when he was at the head of the Republic.

A long-distance electrical transmission line is in some respects like a railway in its relation to the country through which it passes. The first necessity of a railway is to obtain sufficient business, especially short local traffic, to enable it to meet expenses. This condition, almost equally, applies to electrical power transmission. As a rule, unless the cost of developing power is much lower at one point than another, it will not pay to run transmission lines over long distances, except where business can be obtained at intermediate points. The Mexican Light & Power Company is fortunate in that it has a large number of customers for current on its lines between Necaxa and El Oro. At Irolo there is a distribution centre, from which current is sent north to Pachuca, in the State of Hidalgo, and south to the State of Puebla. Nearer to Mexico City a large amount of power is used in pumping water in the valley for irrigation, and also at Xochimilco in connexion with the city water supply.

Mexico is a very well-lighted city. It is claimed that the number of public lamps is greater in proportion to the population and the mileage of streets than in any other city in America. Some of the principal thoroughfares, like the Avenidas San Francesco, Cinco de Mayo Juarez, San Juan de Letran, and the Paseo de la Reforma, are magnificently illuminated. Lighting takes in current the equivalent of 30,000 horse-power, and 100,000 horse-power is supplied for motors and heating and cooking apparatus.

Some figures relating to operations of the company were supplied by Mr. W. H. Fiske, the chief engineer, and are worth quoting :—

Length of 85,000 volt lines, 200 miles.
Longest distance of power transmission, 196 miles.
Weight of cable, 2240 tons.
Area of right-of-way (transmission line), 3000 acres.
Estimated annual flow of rivers used for power, 17,750,000,000 cubic feet.
Average rainfall, Necaxa, 93¾ inches per annum.
Length of tunnels driven, 21½ miles.
Average effective head of water, 1440 feet.
Average effective pressure, 610 lb. per square inch.
Greatest head of water, 2100 feet (Texcapa power-house).
Length of railway built, 28 miles.
Maximum capacity of individual generators, 16,750 h.p.
Generator voltage, 4430.
Generator speed, 300 revolutions per minute.
Average loss of power, 1910–11, 10·8 per cent.
Average loss of power, 1912, 7·8 per cent.
Average daily power generated at Necaxa, 87,000 h.p.
Future capacity of Necaxa, 127,500 h.p.
Average daily output of whole hydraulic system, 120,000 h.p.
Gross earnings, 1912, $7,506,176 Mexican.
Net earnings, 1912, $5,653,033 Mexican.

The developments carried out by the Mexican Light & Power Company have been dealt with at some length for three reasons: first, because it is one of the largest of its kind in the world; secondly, because it is a British enterprise; and lastly, because it is a typical example of what is being done in Mexico for the utilization of water power.

CHAPTER IX

INDUSTRIES

Industrial developments—A novel railway—Cotton and jute factories—Orizaba—Vera Cruz—The oil industry

ANY account of the works carried out in connexion with the electrical installations of Necaxa would be incomplete without some reference to the extraordinary piece of railway construction which was necessary before the works could be commenced. Owing to the situation of the waterfalls, which were isolated from all communications with the rest of the country, it was necessary, before anything could be done, to build nearly 30 miles of railway for the conveyance of machinery and material. This line constitutes a wonderful feat of engineering, which is probably unique in the annals of railroad construction. Considerable portions of the track are laid on an 8 per cent grade—that is a slope of about 1 in 12—and there are curves of only 28 feet radius. Engineers will understand what that means. The ordinary layman will be able to appreciate it to some extent when it is stated that the sharpest curve in a tramline going round a street corner is never less than 42 feet radius. So crooked is the line which runs from Carmen to Necaxa that there is an apocryphal story current among engineers in Mexico to the effect that a big snake once set out to crawl along the line, but broke his back before he had completed the first kilometre!

It is beyond doubt the steepest and crookedest railway in existence. Ordinary locomotives would be quite useless upon

it, and "Slay" engines have to be used to haul the trains. The vehicles, instead of being coupled in the ordinary way, are connected by steel drawbars 8 feet long, which work on a pivot so as to prevent the carriages from derailing each other on the curves. Yet withal, a journey over it is as delightful an experience as can be imagined. It traverses one of the most picturesque regions in Mexico. For the greater part of the distance between Carmen Camp and Berestain and the terminus at the farther edge of the great Tenango dam the railway winds along the face of the terrific cliffs which enclose the gorge of the Necaxa River, creeping round on a narrow shelf that only affords room for the metals. It is no exaggeration to say that at a score of points one could drop a pebble from the carriage window 1000 feet sheer down into the river. The engine swings round rocky corners with a cow-catcher projecting clear out into space over the abyss, and again and again, so sharp are the curves, the front part of the train is proceeding in one direction while the rear carriage is going the opposite way.

The scenery is picturesque beyond description. A luxuriant tropical forest clothes the side of the great gorge, and every tree is itself a garden of rare and beautiful vegetable parasites, among which the eye is constantly charmed with orchids that would be the treasures of a hothouse at home. Far down in the depths the Necaxa River brawls along on its course, foaming over rapids or leaping in tremendous cascades over waterfalls that would be world-renowned, and be the haunt of countless tourists were they in any other land than Mexico.

The most famous mountain scenery in the world, not even excluding the "Kicking Horse" or "The Eagle's Nest" passes in the Rocky Mountains, the great cañon on Fraser River or the Mo-Tien Ling ("Heaven touching Pass") in the Shan Mountains in China, can surpass for sheer grandeur and beauty the gorge of the Necaxa River.

Between Carmen and Huachuiango the railway drops over 4000 feet in 12 miles, the last part of the journey being made in a series of gigantic zigzags down the mountain face, where at times four different levels of the line can be seen from the carriage window.

When Mexico becomes better known, and travel within its borders becomes safer than it is under existing conditions, the Necaxa district should become one of the most favourite tourist resorts in the world; and the climate is simply perfection. Just now a visit could only be undertaken with a certain amount of risk. When the journey, of which this volume is the outcome, was being made, the district was reported to be the haunt of rebels—perhaps robbers would be a more apt description, and an escort of one hundred and thirty soldiers accompanied the writer. These " soldiers " had only recently been enrolled, and they were so unfamiliar with their arms that accidental shots were continually going off. Several casualties, though fortunately none were fatal, arose from this cause. The officers in command kicked and cuffed most unmercifully the clumsy soldiers who had fired the shots, and took their rifles away from them during the journey. It was impossible to avoid the feeling that the escort constituted a more serious danger than the rebels, because, though the bullets for the most part flew off harmlessly, one occasionally pierced the carriages in which the passengers were sitting. The soldiers left the train at Huachuiango, and everybody was glad, rebels or no rebels, to complete the journey without them.

Round Necaxa itself the country is exceedingly beautiful. The great Mesa, which stands above the two falls, is laid out with pleasant lawns and flower-beds, in which tropical flowers grow luxuriantly. Along one side of the Mesa runs the now dry bed of the Necaxa River. On the other side is a sheer precipice 2100 feet in height, where the plateau drops down

into the gorge. In the distance on either hand rise abrupt conical mountains wooded to the summit, and away to the south-west opens out the valley leading down to the Tierra Caliente, affording a natural prospect not easily surpassed for beauty and variety. The great dams that have been constructed for the conservation of the waters of the river form lakes of considerable extent, which add a great deal to the picturesqueness of the landscape. Visitors in the years to come will find abundant excitement in climbing the rocky and picturesque passes through the hills, or in making the descent over the lip of the fall of the gorge below.

Some years ago, when the works had just been begun, President Diaz, accompanied by his Vice-President, Señor Corral, paid a visit to Necaxa. When he saw the fall and the cage in which the party had to go down, the old President ran his eye critically along the steel cables that stretched away down into the abyss, frail-looking as a spider's web, until they vanished from view.

Turning to the Vice-President he said: "You will remain and follow me down. We'll not both take the risk together."

Then he asked Dr. F. S. Pearson, the president of the company, who was of the party, "Who is in charge of the engine? A European or a Mexican?"

"A European engineer," replied Dr. Pearson.

"Good," was President Diaz's only comment; "let us go down," and he stepped into the cage.

But two gendarmes with drawn revolvers stood by the engineer's side, to see that no tricks were played with the old ruler's life until the signal came up that the Presidential party had safely reached the bottom of the gorge.

The walls of the gorge are absolutely perpendicular. On one side they are composed of hard mountain limestone, on the other of basalt that has been thrust up by volcanic action

through the sedimentary rocks. Half-way down on the western side there is a splendid example of columnar basalt exactly similar to the rocks of the Giant's Causeway, in County Antrim, and in Fingal's Cave, in the Island of Staffa, on the Scottish coast. The columns are about 10 feet in height, and form a band which runs along the face of the cliff until it disappears beneath the mass of plants that cling to the face of the rock.

Among the enterprises which have made great progress in recent years are those connected with textile manufactures. There has been a really remarkable development in cotton spinning and weaving, and the jute industry has also been attended with much success. The principal centres of both these trades are in the districts round the cities of Puebla and Orizaba. The former city, as mentioned in another chapter, is so extensively engaged in the cotton trade that it is familiarly known as " The Manchester of Mexico." Frenchmen and Spaniards practically control cotton manufactures in the Republic; but the machinery employed is almost entirely of British origin, and many of the managers and overseers of factories are Englishmen from Lancashire.

Why is it that cotton and original, not to say peculiar, theories in economics seem to be intimately associated? In the United States, before the Civil War nearly half the Republic held firmly to the conviction, which it sought to maintain at the point of the bayonet, that cotton-growing and slavery were indissolubly linked together. At home in England we have, or had, the famous " Manchester school " of economics, and in Puebla one day while a group, of which I was one, sat chatting together under the trees on the Plaza, a Spanish cotton-spinner solemnly put before me the singular theory that an occasional revolution is necessary to the commercial well-being of Latin-American republics.

What had led up to this remarkable argument was my request for information on the apparently anomalous situation, that while for two years a great part of Mexico had been in the throes of revolt, Puebla had enjoyed a period of unprecedented prosperity. Every spindle and loom in the whole district was running overtime, new factories and mills were being built faster than the Puebla Light & Power Company could provide electric energy to drive them, and the only apparent limit to expansion was the difficulty of procuring enough raw cotton.

Señor ——, a Spanish gentleman owning a large cotton-spinning and weaving establishment near the city, who was one of the party referred to, was the author of the original economic theory. When asked for an explanation—if explanation could be given—how revolution and disorder extending over a period of more than two years could possibly benefit the trade of the country, he replied: "Oh, in Mexico or any other Republic like it, the matter is very easily explained. In times of peace, when things go along smoothly, two or three people at the top manage to annex millions, and then slip off to Paris and spend it there, while their own country does not benefit to the value of a penny. On the other hand, when a revolution is going on, money must be lavished on fighting men, and many other things as well by both sides. Nobody has the chance to grab money for themselves and slip off to Europe. The result is that the revenues of the country are spent at home, instead of being stolen and carried abroad. Thus there is a bigger circulation of cash, a better home trade, and everybody, except the politicians and the soldiers, is quite contented."

Some of us demurred a little against accepting the ingenious theory, but the Spanish cotton-spinner pulled out of his pocket the official report on the returns that every manufacturer is obliged to make to the Government, and showed that in the

two years 1911–12 there had been an increase of nineteen in the number of factories engaged in spinning and weaving cotton. The number of spindles had increased by over 60,000 and looms by 2002, while the sales of cotton yarns and fabrics showed an increase of 13,150,000 pesos (£1,315,000).

"And remember," continued Señor ——, "during these two years we had one successful revolution and another (that of February 1913) was brewing, and there was fighting and disorder in many parts of the country." Later in the day an English commercial traveller who represented a firm of manufacturers of textile machinery in Lancashire, to whom the conversation was related, was inclined to agree with the Spanish cotton-spinner, and said that during that very morning he had sold 100 new looms in Puebla City alone, and that for some time his only difficulty had been to get his orders filled as rapidly as his customers desired.

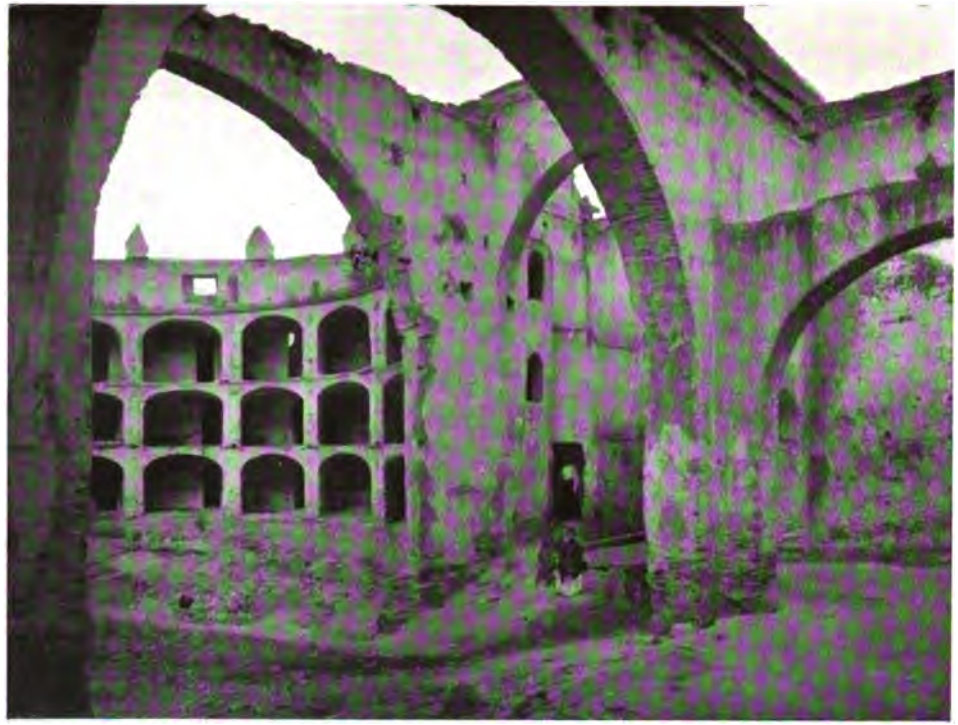
Mr. Worswick, the chief engineer of the Puebla Light & Power Company, with whom I afterwards made a tour of the district, told me he was unable to supply power for new mills as fast as it was required. His company was actually buying current from the Santa Gertrudis Jute Mills at Orizaba to the extent of nearly 2000 horse-power per day, as a temporary relief while the company's new generating station at Tuxpango was being built. This new power-house will develop 42,000 horse-power, and practically the whole of that was sold in advance to the cotton district and to the city of Vera Cruz, to which a new transmission line is being built.

Puebla, known politically as Puebla de Zaragoza, in honour of General Zaragoza's victory here over the French in May 1862, is a clean, handsome city of about 95,000 inhabitants. It is situated on a level plain between Popocatepetl and Malintzi, two mountains that are crowned with perpetual snow. Indeed,

when I was there five snow-capped peaks were visible from the old fortress which crowns the low hill south of the city. Puebla was founded by the Spaniards in 1532 as a base of supplies midway between Mexico and the coast. It speedily rose to importance, and for centuries was a great centre of the trade with Spain. To this day it is the most Spanish city in Mexico, and most of the trade and business is still in Spanish hands. Many of the old houses are exceedingly picturesque, and remain practically as they were in vice-regal days. The style of architecture is distinctly Moorish, and everywhere one sees a lavish use of the old coloured, glazed tiles for the manufacture of which Puebla is famous.

There is one architectural relic that must possess intense interest for people connected with the dramatic profession. This is the old theatre, the first ever built on the American continent. It was erected, so far as the records show, at the time the city was founded, in the first half of the sixteenth century, probably about 1540. Unfortunately the roof was destroyed by fire a few years ago, and it has not been re-edified. But with this exception it is still almost complete. The great proscenium arch is still standing, and so are all the maze of tiny dressing-rooms and offices behind the stage. The auditorium is horseshoe-shaped, and every one of the three tiers of stone boxes is complete. One can still trace the " rake " of the pit, and the gallery over the boxes has the rows of stone seats yet in position.

The handsome entrance and vestibule are complete, though somewhat defaced. The rooms opening off the latter are occupied as residences by two or three families, who have built up the front of several of the larger boxes and use them as bedrooms! Probably some enterprising picture-palace promoter will seize on the old theatre and convert it to modern uses; but as it stands, after nearly four hundred years of existence, the building is well worth a visit.



OLD THEATRE, PUEBLA

Puebla is the most religious city in Mexico, as might be expected in a place the site of which was, according to the legend, marked out by angels for the architects who were appointed to build it. Not far away stands the ruins of the sacred Indian city of Cholula. "Puebla," says Prescott, "seems to have inherited the religious pre-eminence of Cholula, being distinguished, like her, for the number and splendour of its churches, the multitude of its clergy, and the magnificence of its ceremonies and festivals." Many of the old convents and monasteries still exist unchanged, but numbers of them have been converted to commercial requirements to meet the growing demands of industrialism, and at least one is used as a cotton mill. The city has been the scene of many fierce battles. It was captured by Iturbide, the first "Emperor" of Mexico, in 1821, by the Americans under General Scott in 1847, and by the French in 1862. It was the scene of another siege by the French in 1863, after their defeat by Zaragoza, and the late President Diaz gained a great victory over the troops of Napoleon III in its vicinity on April 2, 1867.

To the present commercial generation, however, its chief interest lies in the remarkable commercial development that has taken place in the city and its vicinity. The valley of the River Atoyac is dotted with mills and factories. The reason for this development is not far to seek. The Atoyac and its tributaries, perennially fed by the melting snows on Popocatapetl and Ixtaccihuatl, and tumbling over hundreds of falls, great and small, on their precipitous courses to the low country, furnish abundance of motive power. The accessible falls were soon all occupied, but the textile trade still grew, and the difficulty was to find convenient sites where labour and motive power would be available.

The cost of steam power was almost prohibitive, and it looked as if a most promising industrial development would be checked to the great loss of the town and district. The

problem was solved by the organization of the Puebla Electric Light & Power Company. This company has, in virtue of its undertaking to supply at least 16,500 horse-power in Puebla, obtained a number of valuable concessions in the States of Puebla and Vera Cruz. These include a concession from the City of Puebla for the supply of electricity for light, heat, and power until the year 2007; and one for the use of the waters of the Atoyac and Los Molinos Rivers, in the State of Puebla, and of the Rio Blanco and Atoyac (a different river from the other of the same name) in the State of Vera Cruz. The company also owns and operates forty-four miles of tramways in Puebla and district.

Having obtained these properties, generating plants were installed at the Portzuelo Falls, capable of producing 6500 horse-power, and at the falls on the Rio los Molinos, producing 1000 horse-power. Other falls bring the total up to 10,000 which, as already indicated, is supplemented by current purchased from the power plant belonging to the Santa Gertrudis Jute Mill Company at Orizaba until the new works on the Rio Blanco at Tuxpango come into operation.

At first the Tuxpango works will only be required to furnish 17,500 horse-power, but when required this can be increased to 35,000; and later on the projected development on the River Atoyac, below Cordoba, in the State of Vera Cruz, will give an additional 20,000 horse-power.

It will be seen, therefore, that the enterprise of this British company has made the future of the cotton industry in and around Puebla secure, so far as an adequate supply of power is concerned. The distance from Tuxpango to Puebla is 82 miles, and the transmission lines have already been erected. Spinning and weaving mills are now being erected along the Puebla Valley for a distance of 30 or 40 miles. They follow the course of the line of steel towers which carries the transmission wires, just as in past years one saw little

factories set here and there along the Atoyac River whenever a fall was available to put a wheel in motion.

Although Puebla is the principal centre of the cotton industry, the largest spinning mill in Mexico, and, indeed, one of the largest in the world, is the " Rio Blanco," situated near Orizaba. It is owned by a French company, which has a capital of £1,800,000.

Orizaba, owing to the abundant supply of cheap electric power which will presently be available from the generating stations at Tuxpango, is bound to develop presently into one of the most important manufacturing districts in Mexico. The town is situated at an elevation of 4000 feet above sea-level, in the centre of great coffee plantations. Its ancient Indian name of Ahuaializapan (Joy of the Waters) was given to it because of the many streams which hereabouts burst from the mountain sides and flow down the valley. One of these crosses the centre of the town through a deep and picturesque ravine, now partly bridged over, with houses erected on the arches.

The first flour mill on the American continent was built here by the Spaniards in 1553, and the utilization of the many waterfalls has been continued ever since. The great cotton mills are mostly situated in the suburb of Nogales, but the Santa Gertrudis Mill (jute), owned by an English company, is situated at the northern end of the town.

About four miles from the town is situated the new electric generating station, now being completed by the Puebla Light & Power Company. The power-house is situated in a deep valley below the falls of the Rio Blanco, which enable the waters to be employed at an effective head of 550 feet. Owing to the narrow rocky configuration of the gorge through which the river flows, it was not feasible to erect the power-house in the immediage vicinity of the falls. So the engineers drove a tunnel 734 metres in length through the mountain spur that bars the

river's course, and conduct the waters to an admirable site in the north-west corner of the Tuxpango Valley. A small dam diverts the river into the tunnel. At the southern end the tunnel opens into a great surge tank of ferro-concrete, high up on the mountain side, and from this pount the water is carried in three 48-inch pipes to the turbines 550 feet below. The total distance from the intake to the power-house is 1180 metres, of which 734 metres are in the tunnel.

The generating plant is calculated on a basis of 17,500 horse-power, but the power-house is sufficiently large to accommodate dynamos to twice that capacity, and all the arrangements necessary for increasing the installation to that amount have been made. For the present only the natural flow of the river will be utilized, but later on a narrow dam will be thrown across the river just above the point where it takes its first plunge down the gorge. The reservoir thus formed, though not actually required, will enable any sudden call for extra current to be dealt with, and also act as a reserve of power at all times.

The turbines are overhung on the end of the generator bearings, and though only 4 feet in diameter, are designed to produce 8500 horse-power each. They are thus on the same axle as the dynamos, and, being lubricated under pressure, will require practically no attention. The current leaves the generators at 4000 volts, and is "stepped up" by means of two banks of transformers to 100,000 volts, the pressure at which it will be sent over the transmission lines.

A problem of some interest to electrical engineers presented itself in connexion with the transmission lines in the vicinity of Vera Cruz. It was found by experiment that in the winter months during the prevalence of "northers" sea spray was carried ten kilometres from the coast. The resulting salinity of the moisture on the insulators was so high that with insulators designed for a current of 100,000 volts no higher

pressure than 42,000 volts could be transmitted with safety. Although the line to Vera Cruz was designed for 100,000 volts, the lower pressure will be that used, at least during the winter months, when the northerly gales prevail.

When the additional power-house projected on the Atoyac River below Cordoba is erected the Puebla Light & Power Company will have 70,000 horse-power available for sale in the greatest manufacturing district in Mexico. It will have Puebla at one end and Vera Cruz at the other, with Orizaba and Cordoba and their cotton and sugar mills and coffee plantations in between, all requiring power for one purpose or another. At present its principal market is in Puebla, Atlixco, and Cholula, but the smaller towns of Santo Domingo, Apizaco, Santa Ana, Tlaxcala, Santa Cruz, Panzacola, and San Rafael also use a good deal of current.

The length of the transmission lines is short as compared with the distances to which electrical power is now sent. From Tuxpango to Vera Cruz is only 65 miles, over a very easy country; while to Puebla is but 82 miles. The transmission line to the latter is complete, and has been carrying current for some time. It is estimated that the new works will cost about £300,000 to complete, a comparatively small sum when the amount of power rendered available and the actual and potential extent of the market that is opened up for the sale of current is taken into consideration.

The development of the water power available at such moderate cost was due mainly to the simplicity of the engineering problems involved, and to the fact that the Mexican railway connecting with the port of Vera Cruz had a siding within about three miles of the Tuxpango power-house, from which the whole of the material required could be sent down over the company's tramway by gravitation. Loaded trucks ran from the siding to the edge of the gorge by their own weight.

From thence they were lowered down an inclined railway,

that at one or two points is almost vertical, to the power-house across the river. In company with Mr. Hohler, secretary to the British Legation in Mexico City, I made the descent of about a mile on a train of trucks laden with 20 tons of the huge waterpipes. Though we had perfect confidence in the calculations of the chief engineer, Mr. Worswick, and his assistant, Mr. Miller, who accompanied us, a certain sense of relief was experienced when the bottom of the valley was attained. Later on, when we rode on horseback from the power-house to the tunnel entrance, the mild sensations of the inclined railways were completely effaced.

The bridle-path between the two points zigzags up the face of the mountain to a height of over 2000 feet, and then runs along a narrow shelf cut in the face of a perpendicular cliff for about a mile. The Rio Blanco brawls along 1300 feet below. Once entered on the perilous path, there was no turning back, all that could be done was to sit tight and let the sure-footed ponies take their own course. On one side there was the rocky cliff, so close that one's knee brushed it most of the way; on the other, a sheer drop to the river-bed of well over 1000 feet. Mr. Miller had laughingly told us before we started that we would "remember this ride." I think, if there had been room, some of the party would have dismounted and walked—the cliff portion of the track, at any rate. But that was an impossibility, unless by getting down over the head or tail of one's pony—an acrobatic feat which the surroundings did not encourage one to attempt. However, we all negotiated the passage both ways, and got back to Tuxpango in safety.

Within a couple of miles of Tuxpango and nearer to Orizaba is situated one of the most successful textile factories in Mexico, the Santa Gertrudis Jute Mills. This mill, which employs about 1300 hands and is situated close to the town, is a model in its way. The buildings, which are only one

storey in height, cover a space of over three acres, and are lighted and ventilated in a manner which would secure the approval of the most exigeant of factory inspectors. Practically the whole of the employés are housed in model dwellings on the company's own property. These houses are incomparably superior to the ordinary dwellings of the working classes in Mexico. They are clean, commodious, and sanitary, each one has an abundant supply of pure water, and is provided with electric light by the company, the cost being included in the very moderate rent of 3s. per week. Except in a few model villages in England, like Port Sunlight or Bournville, there are no industrial dwellings to surpass those of the Santa Gertrudis Company at Orizaba.

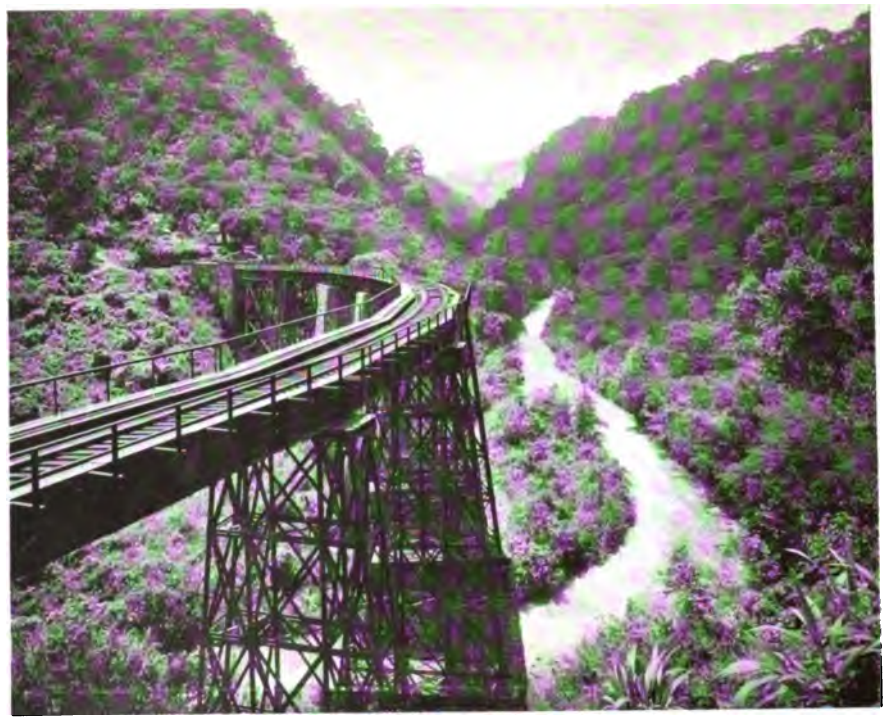
The industry was originally started in 1892 by two English gentlemen, and for a time was not very prosperous. Some years later it was taken over by Lord Cowdray, who rebuilt the mills on a much larger scale and reorganized the business, which then entered on a career of great prosperity. Lord Cowdray, though still largely interested as a shareholder, no longer takes an active part in the management. The present output of the factory averages 7,500,000 jute sacks yearly for coffee, sugar, salt, cement, ores, asphalt, etc., and about 20,000 rolls of jute cloth, besides carpets, rugs, twine, and other similar products. Over 5000 tons of jute are worked up annually, all of which is imported from India at a cost varying from about £26 to £28 per ton. The jute plant grows wild in the tropical parts of Mexico, and two or three years ago an attempt was made, on the initiative of Lord Cowdray, to grow commercial jute on the isthmus of Tehuantepec. Luxuriant crops of the fibre were raised, but the experiment has so far not been a success from the commercial point of view, owing to the difficulty of obtaining skilled labour for the intricate processes involved in preparing the jute for the factory. No doubt in time the obstacle will be

overcome and a new and profitable industry added to the resources of Mexico.

The present equipment of the mills is about 6000 spindles and 320 looms, driven by electricity, generated at the company's own power-house on the Rio Blanco. The electric installation produces about 5000 horse-power, an amount considerably in excess of the company's requirements; but as there is a large market for electric energy in the district, the excess is readily sold at profitable rates to other enterprises. The hours of labour in the mills are from six to six, but the workers have an interval of two hours in the middle of the day to enable them to enjoy the indispensable "siesta" of the tropics. Wages vary from 16s. to 22s. per week for the textile workers, and from 5s. to 7s. per day in the foundry, where repairs and the manufacture of part of the machinery are carried out. One very expert mechanic earns on an average 14s. per day, which probably makes him the best-paid Mexican artisan in the Republic.

The railway from Orizaba to Vera Cruz runs through a very picturesque tract of country. Between the city and the Rio Jamapa the railway drops from over 4000 feet down to nearly sea-level. Near Cordoba the line passes the famous Metlac barranca, passing down one side of the gorge to a bridge 100 feet high, and built on a curve of 325 feet radius, and then up the other side to almost the former level. Five tunnels are passed through in about two miles. The views across the deep, narrow valley, filled with tropical vegetation, are magnificent, and the cautious rate at which the train proceeds over this dangerous piece of track affords the passengers ample time for their enjoyment.

This part of Mexico is almost entirely given over to the cultivation of coffee and sugar, and some very rich and extensive haciendas are seen on either side of the railway. From the great bridge across the Rio Jamapa to Vera Cruz the line passes



METLAC BRIDGE AND RAVINE

through a rather barren tract, covered with thin jungle, and studded with black, sun-scorched rocks. In the rainy season, however, there is a considerable growth of herbage, which affords pasturage to large flocks of cattle and goats.

Vera Cruz is the most important port in Mexico. It was here that Cortes landed, and despite its open and exposed position Vera Cruz has since remained the chief port of Mexico. Vera Cruz was for long one of the plague-spots of the Gulf of Mexico. Yellow fever, malaria, and a host of other deadly diseases were endemic in the place, while the streets were little better than open cesspools. When the new harbour was being built some years ago, the Herculean task of cleansing and purifying the city was undertaken. An excellent sewerage system and water supply was planned and carried out, and most of the surrounding swamps that formed breeding-places for disease-carrying mosquitoes were filled in.

At the present time Vera Cruz is a clean and healthy town, and the once well-nigh intolerable plagues of mosquitoes have practically disappeared. Four railways connect it with the interior, and with the Tehuantepec National Railway to the south. In 1908 these lines formed a Company, known as the Vera Cruz Terminal Company (Ltd.), which, under a concession from the Mexican Government for eighty years from May 29, 1906, undertook the provision of facilities for handling and forwarding traffic at the port of Vera Cruz. The Company has since built a fine terminal railway station adjoining the harbour, and constructed warehouses, railway sidings and piers, provided tugs and lighters, and improved the navigation facilities of the port.

The trade of the port is growing, and the present year will probably show a very great increase. A large portion of this, however, will be directly due to the fact that the railways connecting with the United States have carried little or no traffic since February. Goods and passengers, therefore,

coming from that country have perforce been sent by sea, to the great advantage of Vera Cruz and the railway companies in communication with the port.

Vera Cruz is fortunate in being far removed from the disturbed districts of the Republic. Early in the winter of 1912 there was an abortive attempt at a revolution in the neighbourhood, but President Madero's Administration found that it was easier to buy off rebels than to fight them, and the revolution came to naught. Since then a couple of American warships have lain outside the entrance to the harbour, an absolute guarantee for the peace of the city. Judging by the air of busy trade that pervades the streets and the already extensive and growing provision for the requirements of commerce and industry, Vera Cruz can look to the future, whatever Government is in power, with perfect confidence and equanimity. Whether the Felixistas or Huertistas, Carranzistas or any other "istas," rule the country, Mexico must export goods to pay her debts, and import others for the needs of her people, and Vera Cruz is so happily placed that both processes must tend to her advantage. Fully half the total foreign maritime trade of the country passes through her gates, and about a fourth of the total imports and exports; and this proportion is not likely to be less in the future than it is at the present time.

Although the development of electrical water power and the more anciently established industry of mining constitute very important branches of industry in Mexico, there are indications that the production of oil will presently surpass both of these in value. The existence of oil in Mexico has been known from a very remote period. The ancient builders who reared the cyclopic structures whose ruins still puzzle and astonish the archæologist, used asphalte and bitumen as a cement, and the priests of forgotten faiths burned petroleum on the altars of their gods, just as it was burned in Egypt and

Asia Minor, perhaps thousands of years before the beginning of the Christian era.

For ages the ancient inhabitant of Mexico drew supplies of petroleum from a natural oil spring near the Rio Soto de la Marina, and in many places along the northern coast of the Gulf of Mexico deposits of oil and asphalte were known to the natives from ancient times by the name of "chapapoteros." But it was only in the early years of the present century that attention was directed to these indications of the potential wealth that lay beneath the surface of the soil and practical exploration was begun. One of the greatest oil wells ever known in any country was drilled in the Tampico District, ten miles from the coast. The oil in this celebrated but unfortunate well, known as the Des Bocas, was struck at a depth of 1800 feet on July 4, 1908. It rushed to the surface under pressure sufficient to force it nearly 400 feet into the air. Unhappily the flood of oil immediately came into contact with the fires of the engine which drove the boring machinery and burst into flames. It burned for nearly two months, and it is estimated that at least ten million barrels of oil were consumed. The supply of oil in the well is now exhausted, and it only produces a flow of salt water mixed with small quantities of petroleum.

The oilfields already explored extend over a wide area in the States of Vera Cruz, Tamalupas, San Luis Potosi and Tobasco, and oil is also known to exist in Chiapas, Oaxaca, and other places. The Mexican Eagle Oil Company, which is an entirely British enterprise, have the largest share in the development of the new industry, and is by far the most important oil-producing and refining Company in the Republic. Besides its fields in Northern Vera Cruz, where a very large refinery is in operation, it owns several splendid wells in the Isthmus of Tehuantepec, where another refinery, with a capacity of over 7000 barrels of refined oil per day, is situated at Minatitlan, on the Coatzacoalcos River.

The existence of oil on the Isthmus was first suspected by the engineers engaged in constructing the National Railway between Puerto Mexico and Salina Cruz on the Pacific coast. The Eagle Company, which had concessions covering the district, sent expert geologists to examine and make a report on the geological formation. On their advice wells were drilled at San Cristobal and Texuanapan, and at both places an abundant supply of oil was found. On the Isthmus the petroleum is mostly found lying between a stratum of limestone and one of salt, though it has also been discovered when the salt is overlain with sandstone. The salt beds below the oil have been proved by a number of experimental borings to be about 1000 feet thick, and extend over many hundreds of square miles. The amount of salt contained in this vast deposit is incalculable, and will no doubt one day form the basis of important chemical industries.

From the San Cristobal field the oil is pumped through pipes to the refinery at Minatitlan, but that from the other wells at Texuanapan, Solidad, and Ixhuatlan, which lie on the opposite side of the river, is conveyed in large tank barges, each of which conveys about 200 tons. The site chosen for the refinery is an admirable one. It is situated on the banks of the Coatzacoalcos directly in the centre of the oil region. At this point the Coatzacoalcos is a wide, deep river, which enables steamers of 7000 tons to tie up against the bank alongside the refinery. On the occasion when the author paid a visit to the spot a steamer was loading 6000 tons of asphalte for Montreal, and the same day from Puerto Mexico, 20 miles lower down, at the mouth of the river, one of the Company's new tank steamers, the largest of her class in the world, sailed with 15,500 tons of oil.

New machinery is now being erected at Minatitlan, which will increase the output of the refinery to 10,000 barrels of refined oil per day. In addition to this there is a big output of

residuals, such as lubricants, paraffin wax, petrol, naphtha, fuel oil, and asphalte. Of the latter about 800 barrels a day are produced.

Over one thousand men are employed in the works, and a large proportion of these are Chinamen. These Asiatics are spoken of by the manager as very reliable and competent workmen, who can be trusted with the discharge of every kind of work in connexion with the enterprise. Everything required in connexion with the works, such as barrels, cases, tins, etc., is made on the spot, and all repairs are effected in the Company's own workshops.

Puerto Mexico, which is the chief outlet for the district, is a very busy and important port. Besides its large trade in oil, it is the Atlantic terminus of the Tehuantepec National Railway, which alone provides about a million and a half tons of cargo annually. Ten regular lines of Atlantic steamers use it as a port of call, and some of these, like the American Hawaiian Company's ships, only burn oil fuel. The facilities which the Eagle Oil Company's refinery affords for bunkering these and other vessels burning oil are of great importance to shipping. Besides this, the Company also provides all the fuel used by the engines on the Isthmian, the Pan-American, and the Vera Cruz al Isthmo Railways.

Until the Tehuantepec National Railway was built and the oil refinery was constructed at Minatitlan people had almost forgotten Puerto Mexico and the Coatzacoalcos River. Yet, as far back as the days of Cortes, it formed an important part of the most frequented route across the continent. In more recent times, during the early days of the gold discoveries in California, regular lines of steamers ran to Minatitlan in connexion with the passenger and goods services across the Isthmus, and many thousands of miners and adventurers reached the new El Dorado on the Pacific coast by this route. But when the Union Pacific Railway stretched its metals

across the United States the Isthmus route fell into desuetude. With the building of the new railway, the construction of the harbour at Salina Cruz in the Pacific, and the deepening and improvement of the estuary at Puerto Mexico, a new era of activity began, to which a tremendous impetus was given by the oil discoveries. The railway, which was originally begun by the Mexican Government, was not attended with much success, and several attempts at its completion ended in failure, until the work was taken in hand by Messrs. S. Pearson & Sons, and the line is now worked in partnership with the Mexican Government by this firm.

The Isthmus of Tehuantepec has a total width of 134 miles, and is the narrowest part of the American continent, with the exception of the Isthmus of Panama. Humboldt, with his usual penetration, saw the possibilities which this narrow neck of land would one day offer, and described it as "the bridge of the world's commerce." It is across this bridge that the railway now runs due north and south. A journey over it between the Atlantic and the Pacific, which can be accomplished in about seven hours, is a very pleasant experience. The line is well laid; the rolling stock is new and equipped with every modern convenience; and as the track is sprinkled throughout its whole length with oil, and the engines burn oil fuel, there is an absence of dust and smoke that the traveller on American railways is well qualified by experience to appreciate at its true worth.

From Puerto Mexico for about 90 miles the line runs through a tropical jungle, which in the rainy season, when the vegetation is in flower, is a veritable riot of colour. From the windows of the cars glorious orchids and flowering plants may be seen growing as mere weeds and parasites in a luxuriance which no horticultural skill could reproduce in a colder clime. Humming-birds flash like living jewels among the foliage. Flocks of parrots and other birds with feathers of gold and

flame flutter through the ever-changing scene, forming a kaleidoscope of beauty and colour that only the richest tropic can produce.

As the train approaches the hills—the highest point on the line is only 750 feet above sea-level—the character of the scenery changes. Vegetation becomes thin, and when the watershed is crossed and the journey down the Pacific slope begins the country is bare and arid, and a shower of rain is a subject of comment for weeks.

At both terminals the railway, which runs alongside the steamers, is fitted with the most improved facilities for handling cargo. The entire load of a 12,000-ton steamer can be taken out of the holds at Salina Cruz, carried across the Isthmus, and be loaded on board another ship at Puerto Mexico in less than three working days. As the Isthmus of Tehuantepec has a considerable geographical advantage over Panama in relation to the world's great shipping centres, the managers of the Isthmian Railway are satisfied that it will still be able to compete on favourable terms even when the new Canal is in full working order. Two special advantages are possessed by the Tehuantepec route. One of these is the saving of about 1200 miles in distance as compared with Panama, and the other is that tolls will only be payable on the actual weight of cargo handled, and not on the total displacement of the ship, as in the case of the Canal. Nor will there be any loss of time, because cargo can be transhipped and sent away in about the same period as it would take the vessel to go south to the Canal, pass through it, and make the same degree of north latitude as that in which Tehuantepec is situated.

A project is now under consideration for doubling the railway, so that its capacity for handling traffic will be correspondingly increased.

In the Northern oilfields the main outlet for the production is at Tampico, in the extreme southern portion of the State of

Tamaulipas, and at Tuxpan in Northern Vera Cruz. Tampico, since the discovery of oil, has become the second port in the Republic, and ranks next to Vera Cruz in the amount of traffic. Situated about six miles from the mouth of the Panuco River, vessels can lie alongside the wharves, thus enabling cargo to be dealt with easily and expeditiously. It has excellent railway communications with the interior, and a new line which is being built will open up a rich and very fertile district in the south-west, and will afford the shortest and easiest route to Mexico City. In addition to these facilities for commerce a canal has been constructed through the lagoons along the coast connecting Tampico with the oil port of Tuxpan, 115 miles to the south.

This latter port is unsuitable for large vessels, but the difficulty is surmounted, so far as oil is concerned, by a device known as "sea-loading pipe lines." The pipes for conveying the oil are laid along the bottom for about two miles out to sea, where the ends are raised to the surface and secured to large floats. Double moorings have been laid down, and tank steamers can moor to these and take a cargo of oil on board in almost any weather, except the severest "Northers."

Tampico, with its secure harbour, a large and very rich territory behind it, and excellent railway connexions, must eventually become a very important city. It is developing at a very rapid rate. The population has increased by over 30,000 inhabitants within the last four or five years, and manufacturers are taking advantage of the abundant supply of the cheap and easily handled oil fuel. Numerous factories are being built, and there are indications that a "boom," to use an Americanism, "is in sight." Among the new enterprises in connexion with the town is a Company formed to provide an electric tramway service and electric lighting. The tramway will connect the city with a new suburban and residential resort, which is being built on the coast,

MARKET SCENE, TAMPICO

and where large hotels will be provided for the accommodation of visitors and residents. This Company, known as the Tampico Light, Power, & Traction Company, has bought out the existing small Electric Light Company and the old mule-drawn tramway system, which, like most Mexican-owned and directed enterprises, were anything but efficient.

Tampico, it is interesting to note, is the most English town in Mexico. A very large proportion of the inhabitants have come from the United Kingdom, and these, with Americans, form the bulk of the population. A city with a foreign population of this character naturally offers a very promising field for enterprise, and the new Light & Power Company has already made contracts for the supply of electric current, and has secured a remunerative business, although the generating stations are not yet completed. The power for driving the machinery will be supplied by oil-engines. Owing to the low cost of this fuel at Tampico it is estimated that it will be possible to produce current at the rate of about a farthing per kilowatt-hour.

Tampico people are very enthusiastic about the prospects of their town, and they point with pride to the rapid developments that are taking place in its main industry oil, to the increasing trade of the port, and, above all, to the rapidly growing population. They look forward to the time when, as they claim, Tampico will be the biggest and busiest city on the Gulf coast of Mexico.

CHAPTER X

HORTICULTURE

Fruit growing—A banana plantation

IN dealing with the industries for which Mexico is suited, it would be inadvisable to omit some special reference to agriculture, for which the soil and climate of the country are specially suited over very large areas. Although agriculture has been almost entirely neglected in the past, it is not too much to say that there are few countries in the world which offer greater facilities for its prosecution. Whether one wants to cultivate rubber or strawberries, pine-apples or edelweiss, he can find a place in Mexico suitable for the growth of any crop within the wide range indicated. A journey of less than twelve hours will carry the traveller from the region of everlasting snows, where only a few scanty lichens exist, down to the region of hardy cereals and the maguey country on the high plateau, where the cactus, that produces the natural beverage, pulque, flourishes, and then through the sugar and coffee belt down to the hot regions where rubber, cocoa, vanilla, bananas, and other tropical plants thrive to perfection.

There are places on the eastern side of the Republic where within a distance of fifty miles one can see every species of vegetable life from palms to arctic willows, each growing wild in its natural habitat. There are districts in the Valley of Mexico and in the State of Guanajuato where strawberries of exquisite flavour are grown continuously throughout the

year. In the great vegetable market of Mexico this fruit is on sale on every day of every month in the year, and as the capital is only twelve hours by rail from the torrid coastal region, the rarest tropical fruits are delivered fresh and in the pink of condition. Apples, pears, peaches, and apricots, perfect in flavour and colouring, are sold side by side with alligator pears, oranges, bananas, pine-apples, grape-fruit, custard-apples, guavas, delicious varieties of Sapote, and scores of other rare fruits, whose very names are unknown to dwellers in Northern climes. Yet, with all the inducements of climate and soil, and with an insatiable and highly profitable market, this branch of husbandry is greatly neglected, and enormous quantities of fruit, both fresh and preserved, are imported from the United States. The native Mexican is loath to abandon his traditional methods of cultivation, and the foreigner, although more enterprising and fully alive to the opportunities available, mostly seeks other ways of acquiring wealth.

The products of the "chinampas," or floating gardens, of Lake Xochimilco was celebrated before the Spanish Conquest, but the Indians who then cultivated them, and whose descendants now cultivate them, have made no alteration in their methods and refuse to change. They have taken up the cultivation of a few European vegetables introduced by the foreigner, but there progress ends. It is only very recently that the energy and knowledge of new-comers has been directed to fruit growing. Here and there, especially in Vera Cruz and Oaxaca, small colonies, mainly composed of Americans, have acquired land and made plantations of bananas, pine-apples, and citrus fruits. The profits from these ventures have been such as to stimulate their promoters to greater efforts, and there is no doubt that in time there will be sufficient fruit grown in Mexico not only for home consumption but for a large export trade.

The labour of one little colony of people from Illinois in

the United States, which has established itself at Medina, on the Vera Cruz al Isthmo Railway, shows what can be accomplished. Pine-apples, grape-fruit, and oranges are the principal crops grown. The citrus trees are only just beginning to bear, but profits of well over £100 per acre are being derived from these and the pine-apples, which are grown in combination with them. The colonists express themselves satisfied that, as soon as they can begin to make regular shipments in car-loads—Americans by the way seem to think in car-loads—this return will be substantially increased.

It is impossible within the space at disposal to discuss the wide subject of fruit growing in the Republic, but an account of one special branch dealing with cultivation of bananas, the most universally consumed fruit in the world, may be of interest.

When I was on my way to Mexico I made the acquaintance of two gentlemen on board the steamer between Havana and Vera Cruz, who were largely engaged in this industry. At their invitation I visited their plantation at Macineso, on the Rio Tonto River, where over twelve square miles of bananas are in bearing in one vast plot. From this plantation in the bearing season as much as 20 tons of fruit per day are shipped to Mexico City.

The plantation is situated on a tract of deep alluvial loam lying along the Rio Tonto, a large tributary of the Rio Papaloapam. It is 30 miles away from the railway, but the river furnishes a very convenient means of transport for sending the fruit down to the railway station at El Hule. The trip along the river from El Hule to Macineso forms a delightful water journey. The Rio Tonto is a true tropical river. Under the brilliant sunlight its waters appear a beautiful clear green, flowing between two huge walls of dense vegetation. It simply swarms with fish, and as the motor-boat skims along scores of alligators, some of them of enormous size, slip from

the clay banks into the water, in which hundreds of fresh-water turtles can also be seen.

The banana plantation has a frontage of about 9 miles along the river, and was originally bought with the intention of being used as a cattle ranch. For various reasons this purpose was not pursued, and the land lay idle for several years. Then my steamer friends, Mr. J. M. Bain and Colonel Roberts, suggested to the proprietors that it might be suitable for growing bananas, for which there is an immense market in Mexico. They formed a Company, termed the Alvarado Construction Company, and undertook to clear the land, plant bananas, and market the fruit for one-third of the net produce.

In order to interest Americans in the venture, 1000 plots of 5 acres each were offered free, on condition that the persons taking them up paid the cost of clearing, which amounts to about £12 per acre. These plots were seized at once, and the fortunate owners have obtained from 14 to 22 per cent on their investment. The method of clearing the jungle, which grows in extraordinary density on these rich lands, is very simple. Peons are employed to cut down the undergrowth with machetes, and then other workmen follow and fell the large timber. Under the burning tropical sun the whole mass soon becomes as dry as tinder, and is burnt off.

At the beginning of the rainy season, Indian corn is planted among the charred debris by the simple process of making a hole in the ground with a pointed stick and dropping in the seeds. In three or four months the crop is ripe, and the usual experience on the Macineso plantation has been that the first crop of corn about pays the entire cost of clearing. The luxuriance of the growth in the rich soil is almost incredible. On one newly cleared tract of about 200 acres, I saw corn stalks 15 feet high with five, six, seven, and sometimes more ears on the same stalk. One stalk, which is kept at the offices

of the Company as an "exhibit," bears no less than seventeen well-developed ears of corn. The only cultivation required during the growth of the crop is to cut down the weeds. An extraordinary circumstance in connexion with the work is the rapidity with which the charred trunks and debris left after the burning rot and disappear. At the end of twelve months all but the biggest trees have rotted into the ground, and at the end of two years not a trace remains even of trunks as much as 4 or 5 feet in diameter.

When the first corn crop is nearly ripe bananas are planted between the rows at the rate of 200 plants to the acre. In twelve or fifteen months the plants are bearing fruit, and in the second year are in full luxuriance. The average produce of the plantation is about 25 tons of bananas per acre annually. The fruit sells in Mexico City, which takes all that the plantation can produce, at from £6 to £8. 10s. per ton. As the cost of production and railway freights amounts to only about £3. 4s. per ton, there is a net profit of over £60 per acre to be divided between the owners of the soil and the working Company. The thousand small plots on the plantation are worked with the rest, so that the method followed is really a big scheme of co-operation.

Planting began in 1908, and during the last three years the enterprise has made an average return of over 20 per cent on the capital employed. It is expected that this rate of interest will increase considerably in the future, as during the first year or two the quantity of fruit marketed was naturally small, and during the last two years there were some losses owing to fruit being delayed in transit on the railways in consequence of interruptions due to revolutionary troubles.

At present the bananas are shipped in barges down the river to the railway station at El Hule, and from there they go by rail to the capital. A siding runs down from the railway station to the river bank, and the bunches of fruit are con-

veyed directly from the barges into the cars. The Government has projected a railway running from the main line at Buena Vista which will cross the centre of the plantation, and will therefore, when completed, greatly reduce the cost of shipping produce.

The Rio Tonto forms a considerable obstacle to the building of the railway, as it is wide and very deep. In places the depth of the water is over 500 feet, and the engineers laying out the line had to search for miles before they succeeded in finding a suitable site for the bridge, and even at the chosen point the river was over 40 feet deep.

The Macineso plantation is in many ways well worth a visit. Development has been carried on in a very methodical and regular fashion, and the whole enterprise is managed on sound business lines, with typical American attention to labour saving. The managers' residences and offices are beautifully situated on the banks of the Rio Tonto, surrounded by shady trees and well-kept gardens, in which an infinite variety of tropical fruits and vegetables is grown. Here and there on the plantation are located villages of palm-thatched dwellings for the use of the labourers. Near the centre of the property is a knoll on which once grew an enormous mahogany tree. This was cut down to about 15 feet above the ground level, leaving at that height a platform 5 feet in diameter. A flight of steps cut in the great buttress roots that spring from the trunk leads up to the platform, from which a magnificent view can be obtained. From this point the eye ranges over a banana-field four miles long by three miles wide : twelve square miles of bananas, and nothing but bananas ! A great green sea of fruit-bearing plants, their immense leaves dancing in the wind and sun like wavelets on a lake.

From this point we rode mile after mile under the spreading leaves, amid which hung great bunches of bananas, some of them weighing 100 lb. and over. A tropical rain-storm came

up as we rode, but taking shelter under the tall plants (most of them were 20 feet high or over) we escaped the worst of the downfall. Later on we proceeded to where the untouched jungle spreads its shade. A narrow path had been cut through it, and along this we passed in single file, the green walls rising on either hand so dense that one's horse could not step a single yard aside.

In this forest are found mahogany, lignum vitæ, rosewood, Spanish cedar, and other rare woods, that will presently be cut down and burnt as rubbish as the land is cleared for fruit. As we rode, a troop of monkeys, sixty or seventy of them, swung through the tree-tops over our heads, chattering and scolding, and sending down showers of broken twigs and nuts about our ears. The leading member of the party a little farther on was surprised by a tapir, which dashed across the path and startled his horse so that he was nearly unseated.

The peons who are employed on the plantation lead very comfortable and happy lives. The proprietors treat them well, and though they have to work pretty hard, their lot is much better than that of the average labourer employed on Mexican haciendas. Work usually begins at four in the morning, while it is still dark, but the women have been up several hours earlier grinding the Indian corn for the tortillas (pancakes) which, with beans, forms the staple food of the Mexican people. Half a score of tortillas rolled as thin as paper, and a handful of boiled beans, with a few green peppers so pungent that they blister the unseasoned tongue, constitute a meal, and the workman sets off to his daily toil. In gathering the bananas he cuts down the whole plant with a single blow of the machete. With another blow he severs the bunch of fruit and dexterously catches it before it touches the ground, as its fall would crush the fruit and make it unsaleable. The old stem rots where it lies, and supplies a fertilizer for the other plants in the "hill," as the group of stems is termed. Each hill contains on an

AVENUE OF PALMS

average six stems, and will produce at least four bunches of bananas every year. As the fruit is cut it is piled on bullock carts and carried down to the river, where it is loaded on barges, and these are towed by a little stern-wheel steamer to the railway.

The whole of the work on the plantation is done by Indian labour under the superintendence of white men. It was not a little surprising to find that, although the plantation is situated in a tropical valley about 300 feet above sea-level, malaria is practically unknown, and Europeans enjoy excellent health. Banana-growing as practised at Macineso is a very pleasant and profitable occupation, and it has been dealt with at some length as a typical agricultural industry in Mexico.

Across the river from the plantation is a large cattle ranch where white men live and prosper apparently quite as well as their fruit-growing neighbours. This ranch was purchased a few years ago during the height of the rubber boom. It was planted with several hundred thousand rubber trees, and there seemed every prospect that the undertaking would be crowned with success. But presently most of the rubber trees withered and died. Investigations as to the cause showed that the failure was due to a subsoil of tepatate, a species of volcanic mud, hard as cement, which prevented the tap root of the trees from penetrating the ground. For a while the owners did not know what to make of their huge tract of land, but as it had a rich growth of nutritious pasturage, they finally decided to turn it into a cattle ranch. A stock of cattle was purchased, and also several hundred mares and donkeys for mule-breeding. The new enterprise has thriven in a remarkable manner, and the profits, I have been assured, are greater even than if the rubber had grown and flourished like the proverbial green bay tree.

Here, within a few miles of each other, are two remarkable instances of failures which have been turned into success.

On the Macineso plantation cattle-raising failed mainly through indifferent management. Banana-growing, which was adopted in its stead, has proved an assured and rich success. Across the river at Joliette an attempt to produce rubber ended in disappointment, while cattle and mule breeding has proved a veritable gold-mine. Careful investigation in each case would have saved much useless expenditure, but the experiments I have described show that, with reasonable intelligence and energy, it is nearly impossible to have a total failure in agriculture in Mexico. If one enterprise is unsuited for the particular locality, another is certain to succeed; and the settler has only to exercise adequate care in making his choice of soil, location, and crop to find ample return for his capital and energy.

CHAPTER XI

RAILWAYS

Railways and communications—Trade and commerce—Banks currency

THE most remarkable and certainly the most permanent result of the long period of internal peace which Mexico enjoyed during the administration of President Diaz was the development of the railway system of the country. When he came into power Mexico possessed only a few hundred kilometres of line. Practically speaking, the sole means of communication then available in the country were the indifferent tracks which were hardly deserving of the name of roads. When he retired in 1910 the Republic possessed nearly 16,000 miles of railway track; but of this nearly 3000 are small narrow-gauge lines of a local and unimportant character, with the exception of the Interoceanic line between Vera Cruz and Mexico City. About 8200 miles are either owned or directly controlled by the Government, which has, therefore, a very effective and powerful hold on the railway system of the country. The existing railway development, important as it is, is entirely unequal to the requirements. Immense areas, rich in minerals, or with very productive soil, are still practically isolated from the rest of the country. Compared with its extent, the Republic is still very inadequately provided with railway facilities, and even ordinary roads are comparatively few, and are maintained in very bad repair. These conditions would have a very important effect in the case of intervention by the United States,

as appears at the time of writing to be somewhat probable. Owing to the lack of adequate communication and the facility with which lines could be interrupted in many parts of the country, the task of transporting or feeding an invading army would be one of very great difficulty. These difficulties would of course be much less than they were at the time of the war with the United States in 1847, or during the later French occupation in the early sixties of the last century; but, owing to the vast area of Mexico and the character of the country, they would still be very formidable.

The railway communications of Mexico, like those of most other countries, were not built up in accordance with any fixed plan or upon any regular system. For the most part the existing lines owe their origin to private individuals—promoters, and concessionaires—who desired, for one reason or another, to connect certain districts or to open up communication between various cities. Mineral railways—that is, lines built for the conveyance of ore from the mines to convenient points for shipment—formed in many cases the nuclei of several undertakings which have since assumed considerable importance as the country developed. In Mexico, as everywhere, the result of this haphazard method is that in certain localities one finds two or three lines competing for traffic hardly sufficient for one of them, while rich and important regions are still without railway facilities. Acapulco, for instance, the best harbour in Mexico, perhaps the best in the whole of North America, and the natural outlet for a rich district, is still without railway communication. The Mecca of most of the lines is Mexico City, and the different companies sought to reach it at any cost. There are no less than four different lines enter the Republic from the United States border, while nearly as many run inland from the ports to the capital. The Mexican Government, while usually granting concessions freely for the building of railways, has

consistently followed a policy which indicates a closer regard to the future interests of the community than one finds in more advanced countries in connexion with similar enterprises.

In the United Kingdom, for instance, when parliamentary powers are granted for the building of a railway, the public at large ceases for ever to have any ultimate proprietary interest in the line. If at any future time the nation should decide upon State ownership, as seems now to be not improbable, the railways must be bought and paid for in full. Mexico from the very first adopted an entirely different policy. All the railways of Mexico have been constructed under concessions, the terms of which provide for the reversion of the permanent way to the Government after the lapse of a certain time. This period is usually ninety years, at the end of which the Government enters automatically into possession on paying compensation for rolling stock, buildings, and material on hand at the date of the transfer. Not content with this, the Diaz Government in 1903, on the initiative of Señor Limantour, whose far-sighted genius then controlled Mexican finances, entered upon a policy which entirely changed its relationship with railway enterprise. Instead of waiting for the efflux of time to bring the lines into its possession, the Government began to make extensive purchases of railway stock, and in a few years secured a controlling interest in a number of important railway undertakings. At the present time the Government controls the properties formerly known as the Mexican Central Railway, the National Railroad Co., the Mexican International Railroad Co., and the Hidalgo & North-Eastern Railway Co., and it influences in the same way, through stock ownership, the Interoceanic Railway Co., the Vera Cruz and Isthmus Railway, the Pan-American Railroad, and the Texas-American.

The Tehuantepec Railway was built entirely by the State,

and is worked by Messrs. S. Pearson & Sons of London in partnership with the Government. This line is unique, inasmuch as it was built solely for goods traffic between the Atlantic and the Pacific Oceans, across the isthmus of Tehuantepec. The work was undertaken after the failure of the French attempt to construct the Panama Canal, when it appeared that that gigantic enterprise would never be completed. Now that the Panama Canal has been built, it is probable that the traffic of the Tehuantepec Railway will be to some extent affected, but the operating Company is confident that it will still be able to compete on terms of equality, as regards freight and transit of goods, with the new waterway.

This railway constitutes the only instance in which a sovereign State is associated on equal terms with a private firm in a commercial undertaking. The fact that the firm in this unique arrangement is an English one is an indication of the pre-eminence of the United Kingdom so far as railway enterprises in Mexico are concerned. American capital is largely invested in the Northern Mexican lines, but the United States has been too busily engaged in developing her own vast system to devote much time to railway work in other countries; and so it is found that in Mexico, as in the other Latin-American republics, the influence of the Englishman has impressed itself everywhere on railway affairs.

The first piece of railway ever constructed in Mexico was that from Mexico City to Guadalupe, a distance of four miles, which was built in 1854 by an English Company. This Company had a concession to build a line from the capital to the port of Vera Cruz on the Gulf of Mexico, and the work was completed and the line formally opened on January 1, 1873. The undertaking could have been finished much earlier but for the singular interpretation put upon a clause of the Concession by the Mexican Government. This clause set out that the Company was to construct a line " from Mexico City

to Vera Cruz." Naturally enough, the engineers assumed that it made no difference whether the railroad was built from Vera Cruz to Mexico or from the latter city to the former, and they proposed to push the work outward from the coast, using the finished portions of the line to transport material and supplies to the railhead. But no easy-going British idea of that kind would suit the literal Mexican. The Concession said the line was to be built from Mexico City to Vera Cruz, and built it must be in that way, and no other. So every bit of contractors' plant, every rail and sleeper, every barrel of cement and other material had to be hauled by mules through the mountains, and the line pushed slowly and painfully from the central plateau down to the sea. It added enormously to the cost, and delayed for years the completion of the railway. But what did that matter? The logical Latin mind was satisfied as to the correctness of its interpretation of the contract—and that, after all, was the important point in the affair.

The control which the Mexican Government exercises over the railways through its purchases of stock and the arrangement which gives it possession of the permanent way at the close of a fixed period naturally tends to increase, and eventually the Federal authority will be supreme over the whole transportation system of the country. In one of his stories [1] Mr. Rudyard Kipling suggests that the motto of the future Confederation of the World will be "Transportation is Civilization." It is to be hoped that Mexico, when her Government owns the whole transport system of the country, will realize the author's prognostications.

Despite the disturbed conditions which obtain in certain portions of the Republic, railway construction is still being carried on. One important line now being made, as already mentioned, is that from Tampico to Vera Cruz and Mexico City. This railway passes through a very rich and fertile

[1] "With the Night Mail," in *Actions and Reactions*.

country, particularly in the State of Vera Cruz, where oil-bearing tracts and wide belts of extraordinarily rich agricultural land will be opened up and made available for settlement.

The Mexico Tramways Company, also an English enterprise, is building two important lines to connect Mexico City with the cities of Puebla and Toluca. The first of these will have a length of about ninety miles, while that to Toluca will be about fifty miles long. Both lines are to be equipped for electric traction, and will link up the capital by the shortest and most direct route with two of the busiest manufacturing districts in the Republic. Puebla is the great centre of cotton spinning and weaving, and is known as the "Manchester of Mexico," while Toluca is celebrated for its extensive breweries and potteries and for its manufactures of mats, baskets, and cottage industries generally. In the west the Southern Pacific Railway is completing the line from Nogales, Arizona,—a project initiated by the late Mr. E. J. Harriman,—which will eventually bring that system into direct communication with the Mexican capital. The track has already reached the town of Tepic, and a gap of only about ninety miles remains to be completed. Construction in this and in nearly every other case has, however, been suspended for the present owing to internal troubles.

In view of the entry of the Southern Pacific Company into the Mexican field, it is interesting to recall the reasons given by Señor Limantour for the incorporation of the National and Central Railways under Government control. Speaking in the Chamber of Deputies on December 14, 1906, the Minister of Finance said: "There are three main arguments for the incorporation of these two great systems—first, to avoid friction between different Corporations when the two are competing lines, or when one of them fears being antagonized by a concern in which the Government holds a controlling interest; second, to avoid the absorption of properties not

controlled by the Government, by one of the great railway systems of the United States; and third, the prospect of realizing considerable economies through the consolidation of all the great railways under a single management." It is evident that in 1906 Señor Limantour had the same uneasy feelings with regard to the advent of American railways into Mexico that the Huerta Government of the Republic entertains as to the political intentions of the Washington Government at the present time.

The railway policy inaugurated by Señor Limantour was carried into effect by 1909, when the National Railways of Mexico (Ferrocarriles Nacionales de Mexico), with a capital of £46,000,000, took over the lines mentioned above. Of this capital the Government owns £23,000,458, or just over half the total, so that its control of the whole system is absolutely secured. Most of the mileage of the Mexican railways, however, still remains in the hands of private companies. The three largest of these undertakings are the Mexican Railway (340 miles), Mexico North-Western Railway (531 miles), and the Southern Pacific Railway of Mexico (1195 miles). The scope of the Mexican and Southern Pacific lines has already been indicated.

The Mexico North-Western is a company organized under the laws of the Dominion of Canada with an authorized capital of $40,000,000 (gold), of which $25,000,000 has been issued and fully paid up. One of the principal objects of the Company, in addition to taking over certain railways already built, was to acquire and develop large tracts of heavily timbered land in the States of Sonora and Chihuahua. The Company bought from American Corporations the existing lines—the Sierra Madre and Pacific from El Paso (Ciudad Juarez), on the Texas frontier, to Terrazas, and the Chihuahua & Pacific Railway from Chihuahua to Temosachic, and the line from Temosachic to Madero. Having purchased these properties, the Company

obtained from the Mexican Government authority to merge them into one, and also to build additional lines. This concession was granted in 1909, and since then a line 106 miles long has been built from Madero to Terrazas to link up the lines already in existence. The Company also has authority to build a line between Agua Prieta (opposite Douglas, Arizona) to the Madero-Terrazas line; another line from Miñaca to the Yaqui River; and finally, a line from some convenient point on the existing system to the port of Agiabampo, on the Pacific coast.

An important part of the policy of the Mexican Government under General Porfirio Diaz was the granting of kilometric guarantees for railway construction where the new lines opened up undeveloped or very difficult country. These guarantees varied from £1000 to £2000 per mile, and of course very materially assisted the undertakings. The lines proposed to be built by the North-Western Company between Agua Prieta and the Pacific coast fulfil the conditions referred to, and an application has been made to the Government to give some assistance in the form of a guarantee of interest on the capital invested. The application is still under consideration. If the Government succeeds in restoring settled conditions in the northern part of the Republic, there is no doubt but that the request of the Company will be granted, because the policy of the present Administration in such matters is identical with that of the Diaz regime.

It was, on the whole, a fortunate thing for this Company, as well as for other foreign enterprises in Mexico, that the Madero Administration was so brief. Its policy was distinctly hostile both to European and American undertakings in Mexico. This attitude went so far in railway matters that official instructions were issued by the Government during Señor Madero's Presidency that the foreigners employed on the National railways should be discharged. Hundreds of

conductors and locomotive engineers were dismissed in consequence, and their places filled by Mexicans. Now the Mexican in certain conditions is a very useful workman, but where foresight and sustained attention are requisite he is not quite reliable. The result of the Madera policy was soon seen on the National lines. Time-tables became a mockery; the bill for engine repairs went up enormously, and accidents were unpleasantly frequent. American and European engine-drivers are now being re-engaged as vacancies occur. To show the opinion held by independent managers of the reliability of Mexican engine-drivers, it may be mentioned that on the difficult and dangerous mountain sections of the Mexican Railway between Cordoba and Esperanza no Mexican is ever allowed to take charge of an engine.

An accident, which looked almost like poetic justice, happened to President Madero as the result of his railway policy. He once went down to inspect the Tehuantepec National Railway, and the manager, knowing the President's desire to encourage native talent, placed a Mexican driver in charge of the locomotive of the presidential train. Señor Madero was delighted when he was told of the arrangement, and the train pulled out gaily from Rincon Antonio for Salina Cruz. Alas! before it had proceeded twenty miles the President's protégé on the footplate failed to notice that the signals were against him, and the train crashed into the rear of a goods train, and had a first-class smash-up. When the President and his friends had been extricated—fortunately, without damage—from the wreck, the journey was resumed with a white engineer in charge of the new engine, and the remainder of the journey was made in safety.

All this, however, has little to do with the story of the North-Western Railway, in which a very large amount of English capital is invested. The Company has acquired nearly three million acres in the States of Sonora and Chihuahua,

which, in addition to a heavy growth of timber, have wide areas of valuable agricultural and grazing land, with plenty of water for irrigation or power. The development of a large trade in lumber was begun, and two sawmills, at Madero and Pearson, the former with a capacity of 300,000 feet and the latter 500,000 feet per day, were erected and put into operation. Unfortunately, during the last two years the area has been one of the most disturbed in the country, and work has had to be suspended temporarily. Besides this, the rebels, who appear to have inherited the late President's dislike of foreign-owned railways, have burned bridges, stations, and rolling stock, and committed wanton destruction of the lines in many places, inflicting serious losses on the Company, not only by the actual damage done but also on account of practically total stoppage of traffic since February 1913. The set-back, however, will be only temporary, because the resources of the district it serves, and the valuable timber and agricultural lands owned by the country, render its ultimate prosperity perfectly secure.

The North-Western Railway is not singular in this respect. More than half the total mileage of the National lines running to the north have been rendered idle. Some idea of the condition of railway affairs in Northern Mexico may be gained when it is stated that between the middle of February and September 1913 only one train came through from the United States border. That is, for a period of at least seven months all through traffic has been stopped by the Maderistas in the States of Sonora, Chihuahua, Coahuila, and Nuevo Leon. These are the districts in which Señor Carranza, late Governor of Coahuila, has organized rebellion, with the £24,000 per month paid to him by the Madero Government, which was evidently obeying the Scriptural injunction to " make friends with the Mammon of iniquity " against the day when it would be deprived of its stewardship.

Quite recently the National lines between San Luis Potosi

and Tampico were cut, and for a time there was a partial famine in fuel for locomotives, and also for power works in Mexico City. Since the discovery of oil in the country most of the railway engines have been fitted for burning that fuel; and as most of the supply to the city comes over the National Railway system, the interruption very speedily produced grave consequences. Fortunately, the Government acted with energy, and the lines were soon reopened to traffic.

The condition of the northern railways of Mexico is a fine illustration of the comforting old adage that "It is an ill wind that blows nobody good." While the lines running to the United States frontier have been interrupted for months, the Interoceanic and the Mexican Railways between the capital and Vera Cruz have been running their trains without a hitch, and are almost unable to cope with the volume of traffic. The reason is obvious. In ordinary times the trunk lines running to the United States carry a very large proportion of the freight traffic, and practically the whole of the passenger traffic between the two countries. Now that these communications are cut, the whole flood is diverted into the congested channels afforded by the Interoceanic and the Mexican Railway, or "The Queen's Own," as it is affectionately termed by Britishers resident in Mexico. It is their proud boast that the rebels dare not interfere with this line. This assumption seems, on the whole, to be justified. At all events, it is a fortunate thing that it remained intact, because during a large part of 1913 it and the National line from Vera Cruz via Jalapa were the sole links of railway communication between Mexico and the outside world.

The National Railways of Mexico, the largest system in the country, had its origin in the union of three important lines—the old National Railway, the Mexican Central Railway, and the Mexican International Railway. These three were combined early in 1909 into one organization under the name of

the National Railways of Mexico. It possessed over six thousand miles of track. The new Company which was formed to take over the three lines mentioned then purchased the Vera Cruz and Isthmus Railway which runs from Cordoba and Vera Cruz to Santa Lucretia, where it joins the Tehuantepec National Railway across the isthmus. It also bought the Pan-American Railway running from Gamboa, on the Tehuantepec line near Salina Cruz to the Suichiate River on the Guatemala border. The National Railways also work the Interoceanic line, a narrow-gauge system connecting Vera Cruz and Mexico City via Jalapa. Branch lines, the Mexician Southerns, in connexion with this system run southwards from Esperanza and Puebla to Oaxaca and other points.

The National Railways of Mexico, owing to the extensive mileage of line which it owns, and the extent and character of the country which it serves, is bound to always remain the most important railway system in the Republic. It has four separate points of entry on the United States frontier, its line running south from Matamoros, Laredo, Eagle Pass, and El Paso. It also connects with the important harbours of Tampico, Vera Cruz, situated on the east coast, and with Manzanillo on the Pacific. Large constructions have been in progress for some time. The most important of these, as already pointed out, is the new line from Tampico to Vera Cruz with a spur to Honey, through which the shortest route and easiest grades from the coast to Mexico City will eventually be provided.

Concessions have been granted by the Government for the construction of railways in several districts of the Republic. The most important of these is one recently granted to a Belgian Company for the construction of a line traversing the States of Michoacan, Guerrero, and Oaxaca in a south-easterly direction. Details of this Concession have not yet been made public. A number of other lines are projected

ON THE WAY TO MANZANILLO

in various parts of the country, but in view of the present disturbed condition of the Republic it is doubtful whether they will be begun for some time to come, if at all. The capital loss due to political unrest is very great. No doubt part of it, at least, will eventually be recovered from the Mexican Government, but shareholders in some of the lines cannot look forward to dividends for some time to come.

The Interoceanic branch of the National Railways and the Mexican Railway in ordinary circumstances would this year have been able to pay much better dividends. Unfortunately, the political disorders of the Republic have reacted on the financial position of the country, and the value of the peso has fallen so far in foreign exchanges that the increased profits of the two lines mentioned have been wiped out by the decline in the exchange value of the peso. These lines have had largely increased earnings, and the money is there in Mexico, but if remitted to Europe or the United States for the payment of dividend, the loss on exchange would more than absorb the extra takings of the Companies.

According to Mexican law, no railway can be built in the Republic without either a State or a Federal Concession. Railways constructed under a Concession from the Federal Government are under the jurisdiction of the Department of Communications and Public Works, and the States through which such lines may pass have no control over them. The taxes on the entire property must be paid direct to the Central Government, which allots to each State its proportion, a system very advantageous to the railway companies, as it obviates the necessity of dealing with a number of local authorities.

There is a Railway Commission composed of five individuals, appointed by the Central Government and paid by it. This Commission has no direct authority with regard to the railways, but acts as advisers to the Department of Communications

and Public Works in railway matters. Besides the five Government members, the Commission includes representatives of the various Boards of Trade and Agricultural Organizations, and the Railways are also represented by two delegates. Although all members of the Commission have equal privileges in the matter of discussion and attendance at meetings, only the five Government members are entitled to vote. So far, the Commission has worked very smoothly, and has undoubtedly been of considerable service, not only to existing railway interests, but in furthering railway projects of various kinds throughout the Republic.

The Railway Laws of the Republic, which as a rule were framed, or amended, in accordance with the advice of the Railway Commission, are on the whole marked by a great deal of liberality and wisdom, and have avoided a good deal of friction that has occurred in other countries between the Government and the Railway Companies. The accommodation provided for passengers on the Mexican railways is quite as good as that of any other railways in the world, and the fares charged are said to be amongst the lowest.

The Mexican people are intensely fond of travelling on the railways and on the tram cars in the cities. They will even pawn articles in order to provide themselves with the money to go for a railway journey for the sheer pleasure of travelling. It is not at all an uncommon thing, for instance, for a peon, if he has a few pesos in his pocket, to take himself and his family for a railway journey of fifteen or twenty miles, and then return laboriously on foot to his home discussing the pleasures of the outward trip.

The bulk of the ordinary employees on the Mexican railways are natives, usually Mestizos, but the higher officers, such as the engineers, general managers, and so on, are either Americans or Europeans. The only branch in the ordinary working of the lines on which foreign workmen are largely

employed is in the locomotive departments of the principal lines, where, as a rule, there is a considerable number of non-Mexican drivers, usually British or American, a system which conduces to punctuality and safety in working.

Mexican trade and commerce showed a steady increase all through the long period during which affairs were administered by General Porfirio Diaz. In looking through the statistics the outstanding feature which compels attention is the enormously large amount of minerals exported as compared with other products. This disproportion, however, has decreased considerably in recent years, but even in the latest period for which complete figures are available, 1912–1913, the value of the minerals exported exceeded that of all other exports put together. Gold, silver, copper, and other metals were exported to the amount of over £18,964,000, as against about £10,834,000 for all other commodities. The exports for this period show an increase of £241,000 over that of 1911–12.[1] This unwholesome dependence on mining for the maintenance of Mexican trade balance with the rest of the world is partly a legacy of the old days of Spanish dominion, and partly a consequence of the long period of unsettled political conditions which followed the establishment of Independence. It is all the more remarkable in a country where the fertility of soil, the variety and perfection of climate, and the comparative abundance of labour are specially favourable to the production of agricultural wealth and the development of manufactures.

In effect, it is equivalent to the owner of a rich estate, capable of producing great wealth, but who, possessing a hoard of gold, preferred to pay his accounts from that source rather than derive an income from the products of his land. If the latest returns are examined, it will be seen that three items alone account for three-fifths of all the exports derived from

[1] 1913–14 is certain to show a decrease under all heads.

agriculture. These are rubber (including ordinary rubber and that obtained from the guayule shrub), £3,400,000; fibre, £2,800,000; and untanned hides, £1,070,000. That is, over seven millions out of the entire agricultural exports. Although natural conditions are entirely in their favour for acquiring wealth from the development of agriculture, Mexicans, and—until very recently—foreigners seeking a livelihood in the country, confined themselves mainly to the search for minerals. The soil was left untilled save what barely sufficed to produce food for the population; and the forests, filled with magnificent timber, were untouched except for domestic purposes. This tendency was noted very early by wise economists, and its evils indicated, but without result. As far back as the middle of the sixteenth century, a far-seeing Prelate, Bishop Zumarraga, wiser than his generation, wrote: "The country is rich and very fertile. It contains gold, silver, copper, and lands producing abundantly whatever is needed. He who would reap must first sow, but if the tilling of the soil is neglected to engage solely in the working of mines, the ruin of the country is certain."

The prophecy of the good Bishop has not been quite fulfilled, chiefly because the country is too rich to come quickly to ruin, but Mexico for centuries has, so to speak, continued to pay her way from capital instead of developing the enormous wealth that lies in her untilled fields. California, with almost exactly similar conditions of climate and soil, is in marked contrast to Mexico in this respect. In the American State, despite its great mineral wealth, the people soon saw that the soil offered greater resources even than the mines, and at the present time the wheat crop alone exceeds in yearly value the entire output of all the mines of California. Mexico, with greater possibilities and a wider climatic range, hardly grows food enough for her own population. These remarks must not be understood as inveighing against the development

of mineral resources. That is of course a most essential feature in the progress of any country, but it should not be exploited to the neglect of more permanent sources of wealth. Rapid and spectacular fortunes have been made in large numbers from the minerals dug out of the mountains of Mexico. But, after all, no more can be extracted from a mine than nature has placed there, whereas a fertile soil, if properly treated, is inexhaustible, and trade and industry are perennial in the returns they make to capital and energy.

The Mexican Government for a number of years has manifested a strong interest in the improvement of agriculture. Efforts have been made to educate the farmers and to induce them to adopt more scientific methods of cultivation, fertilization, irrigation, and drainage and the adaptation and rotation of crops. New fruits and forage plants have been introduced; mulberry trees have been brought in with the intention of promoting the silk industry; irrigation schemes have been encouraged and subsidized directly or indirectly, so that it is possible to state that the Government has made a sustained and well-directed attempt to induce the Mexican people to avail themselves of the opportunities which lie to their hand. How hopelessly these have been neglected in the past it is hardly possible to overstate. With a perfect climate and enormous areas suitable for its production, Mexico does little more than grow enough sugar for domestic consumption, while not infrequently maize and other cereals must be imported from the United States. Cotton, which is indigenous to the country, and was cultivated before the Spaniards had set foot on the Continent, has to be bought in large quantities from other parts of America, and even from Egypt, for the factories which foreign enterprise has established. Jute, for which there is a large market in the Republic, has in the same way to be imported from India, while the plant grows wild in the hot country on the Gulf of Mexico.

Complaint is made that much of the deficiencies in Mexican agriculture arises from the difficulty of procuring sufficient labour. This is in some measure true, but investigation shows that a great portion of this trouble arises from the treatment accorded to the peons. There is a very large working-class population. The vast majority of the people come under this heading, but the Mexican labourer is badly paid, and the methods pursued under Spanish rule, and which still prevail in some degree, made his condition hopeless. For generations he was little better than a slave. The early Spanish settlers had Indian families allotted to them, and the labour of these people was exploited entirely for the benefit of their owners, while rather less care was given to them than to the cattle and horses of the haciendas. They were deliberately kept in ignorance and subjection, and this policy, pursued for generations, has almost killed out ambition and a desire for improvement among all native Mexicans. If a wiser policy were adopted, if the people were educated and encouraged to try and rise above the appalling level at which they have been held down for centuries, if reasonably fair wages were paid, then there is no doubt that new wants and new desires would be created, and the Mexicans, like other people, would work to supply them, and a part at least of the labour problem would be solved. In this way also fresh markets would be created, an impetus would be given to trade and manufacturers, and the people who now think it to their interest to keep the Mexican poor and subject would be among the very first to benefit.

An ignorant, hopeless, and unambitious people is a poor asset for any nation. Most of the troubles that vex and harass Mexico arise from this very condition, which enables the wealthy and powerful few to exploit the mass of the nation for their own ends. To it may be traced directly the unrest and discontent and the latent or active rebellion which seems

to be permanently associated with the Republic, save when held in check by an iron hand, like that of President Diaz.

The average Mexican may be unfitted for representative government; he may be unpatriotic to the extent of hardly possessing the sense of nationality; he may be passionate, revengeful, and brutal—he may have many shortcomings—but when for centuries no attempt was made to raise him up in the scale of human kind, but rather the reverse, it is difficult to feel any very great sympathy with his masters and oppressors when the consequences of their wrongdoing recoil upon their own heads.

Mexican commerce with Europe began in the early days of the Spanish occupation, when vessels from Spain brought cargoes of merchandise to the Gulf ports, taking in return hides, tobacco, dyewoods, and such products as could be obtained, but the principal things sought were the precious metals. When a trade route was established via Mexico with China, Japan, the Philippines, and Peru, Mexico became one of the great trade centres of the world. But the passage to the East round the Cape of Good Hope, and, as time went on, the activity of the English, Dutch, and other pirates who infested the Gulf of Mexico and the West Indian Seas, interfered with its further progress, and Mexican foreign commerce became greatly reduced. It revived again at the beginning of the nineteenth century, but owing to the unsettled internal conditions of the country, and the lack of railways, there was little development until 1886. Peace was then established by President Diaz, and the construction of railways was begun, with the result that there was a vast and rapid development of commerce, industry, and national well-being. The character of the exports began to alter. Mexico relied somewhat less upon its output of the precious metals for the maintenance of its trade balance, and natural products began to figure more largely in the Custom House Returns. The

removal of the Inter-State restrictions upon commerce which had their origin in an unwise economic policy, that sometimes even set up a tariff between town and town in the same State, also helped to foster trade and the free movement of commodities; but even to this day, as already pointed out, there is an unwholesome predominance of mineral, as compared with vegetable products, in the trade returns.

As might be anticipated from their proximity and intimate relations, the trade exchanges with the United States exceed those with all other countries combined. Great Britain comes next, but a long way behind. Mexican imports from the United Kingdom in 1909–10 were less than one-fifth of those from the United States.

It is interesting to compare the imports from the five principal countries for the last two years for which complete statistics are available. In 1910–11 it is to be noted the imports from Germany, for the first time, exceeded those from Great Britain. The values are given in United States dollars :—

Counties.	1910–11.	1909–10.
United States	$56,544,312	$56,439,181
Great Britain	11,990,000	11,125,877
Germany	12,780,982	10,082,662
France	9,336,494	8,747,127
Spain	2,841,064	2,639,841

The total imports for these two fiscal years were—1910–11, $102,917,882; 1909–10, $97,432,890.[1] It will be seen therefore that the United States sent in one of these years 54·94 per cent and in the other 57 per cent of the entire imports from foreign countries.

[1] In 1912–13, according to the report of the British Consul-General in Mexico, the imports were $97,886,169, while the exports amounted to $150,202,808, thus showing a considerable trade balance against the Republic. Mexican exports to the amount of over $116,000,000 went to the United States in the fiscal year ending June 1913, or nearly three times as was exported to all other countries.

The export tables show that Mexico's great neighbour takes an even greater share of the exports from the Republic. In 1909–10 there went to the United States 75·76 per cent of the total export, and in 1910–11 she took 76·43 per cent. The export figures for the countries given are interesting, inasmuch as they show that the United States and Great Britain very largely increased the amount of goods received from Mexico. Germany was practically stationary, while France and Spain took a reduced quantity. The greatest disparity in the amount of goods exported and imported is in the trade with Germany, who sells $12,780,000 worth to Mexico and only buys $4,354,172 worth of Mexican produce in return.

The export tables are as follow :—

	1910–11.	1909–10.
United States	$112,248,445	$98,484,319
Great Britain	17,941,176	14,267,250
Germany	4,354,172	4,222,545
France	4,654,939	6,146,823
Spain	792,150	966,920

During the decennial period from 1901–2 to 1910–11 there has been a steady growth in the foreign trade of the Republic. In 1901–2 the total imports were valued at $75,640,296, and in 1910–11 at $102,417,842 (United States currency). On the other hand, exports expanded from a total of $85,888,225 in 1901–2 to $146,826,025 in 1910–11.

It will be observed that the exports have increased in a much greater ratio than the imports. The augmentation is due not only to the natural expansion of trade, but also to the necessity for larger exports to pay the interest on new Government loans and on the large amounts of foreign capital invested during these years in Mexican enterprises.

One outstanding fact in this question of Mexico's foreign trade is that the vexed internal situation during the last three years does not appear to have checked the development

of commerce. Trade and revenue have actually increased. It is no doubt true that the disturbing effects of revolution on the finances of a country do not become immediately apparent. The impetus given by a long period of stable political conditions continues for a time after these conditions disappear. It is probable, however, that the effect of the crisis through which the Republic is passing will be more marked at the close of the current financial year.

At the same time, the general condition of the national trade and finances affords a remarkable proof of the economic strength of Mexico, and indicate clearly that the Republic requires only stable government and wise administration to become one of the most prosperous countries in the world.

In connexion with these observations it may be remarked that Mexico is adequately provided with banking facilities for the purpose of carrying on financial and commercial transactions. At the beginning of 1911 there were twenty-four banks of issue, two Loan Banks and six so-called "Refaccionario" (Banks of Encouragement). In addition to this, there are in Mexico a number of branches of foreign banks, mostly British, French, or Spanish, but some German and American banks are also represented.

No bank can be established in the Republic, or branches of foreign banks opened, without the special permission of the Department of Finance and Public Credit. This permission, according to the Law of May 20, 1903, "will only be granted under such conditions as the Department may deem expedient, and when, in its opinion, it is proved that the foreign house does a banking business in the country where it was founded, and that no valid reasons exist for fearing that an improper use will be made of the permission."

The oldest banking institution in Mexico is the Monte de Piedad (National Pawnshop). It was established in 1775 with a capital of $300,000. Formerly the institution had the

power to issue notes, but this has been now revoked, and all the notes redeemed. The Monte de Piedad is really a charitable organization. It was founded by a wealthy nobleman, who owned the enormously rich silver mines of Rea del Monte, and was set up for the purpose of lending money on personal property to the poor at low rates of interest, so as to free them from the usurious rates charged by private pawnbrokers. Practically anything that possesses value can be pledged, with the exception of live stock. The smallest sum loaned is 12 centavos (about threepence); the largest, in a single loan, is equivalent to £400.

The present Currency Law of Mexico came into operation on May 1, 1905. In accordance with this law the unit of monetary value in Mexico was represented by 75 centigrams of pure gold, and is called a peso. The old silver peso, which contains nearly 24½ grains of pure silver, is declared to have the legal value equivalent to the gold peso of 75 centigrams of gold. The peso is divided into 100 centavos, and coins are issued in the following denominations: gold coins, 10 pesos and 5 pesos; silver coins, 1 peso, 50 centavos, 20 cents, and 10 cents; nickel coins, 5 cents; and bronze coins, 2 cents and 1 cent. The centavo is roughly worth a farthing, British money, and the peso at par is as nearly as possible the equivalent of 2s. 1d. The gold coins of the Republic are composed of an alloy of gold and copper in the proportion of 9 to 1. In the silver coins the metal is a silver-copper alloy which varies according to the denomination, but is also roughly about 9 to 1. Bronze coins are made of 95 parts of copper, 4 of tin, and 1 of zinc. The 5-cent pieces are pure nickel. The Federal Government alone has authority to strike coins, and the privilege formerly enjoyed by private persons of presenting gold and silver at the Mint for conversion into coin no longer exists.

The gold coins and the silver peso are legal tender up to

any amount, and fractional silver coins for sums up to 20 pesos. The nickel and bronze coins need only be accepted in payment up to one peso, but these regulations are not, of course, very strictly observed. Coined money was introduced into Mexico by the Spaniards during the early years after the Conquest. All coins were imported. In 1535 a mint was established in Mexico City, and the first coins minted in America were struck in that year. The money issued between 1537 and 1731 was irregularly hammered out, marked with a cross, two castles, two lions, the initials of the King, and the Mexican mark. Between 1772 and 1821, when the Spanish connexion was broken off, the coins issued bore the effigy of the King of Spain. These coins during the first year of Independence were stamped with a likeness of General Iturbide, who proclaimed himself the first Mexican Emperor; and the Mexican Eagle and the Cap of Liberty appeared on the coins from that date down to 1862. Between 1863 and 1867 Mexican money was stamped with the likeness of the Emperor Maximilian. Republican coins began to issue in 1868. As late as 1895 there were thirteen mints in the Republic, but with development of the railway system, and the consequent provision of increased facilities for transportation, these mints were gradually reduced in number, and that in Mexico City is now the only one in operation. A curious circumstance in connexion with Mexican coins is that during the last century, when there was free coinage of silver permitted, enormous quantities of this metal were sent from the mines to the mints, coined into dollars and exported to China and the Far East, where large numbers are still in circulation. In some of the Chinese treaty ports Mexican dollars are the principal medium of exchange, and are freely accepted by everybody, as the coin is practically worth its face value as bullion.

There is no country in the world whose relations with other States react so immediately upon internal conditions as do

those of Mexico. This is particularly the case with regard to the attitude of the United States towards the *de facto* Government of the Republic. It will have been gathered from what has been said in earlier chapters that the author holds the opinion that if the United States Government had recognized the administration which succeeded that of President Madero in February 1913, it would in all probability have been able to restore order in the Republic during the summer. Unhappily, President Wilson and his Secretary of State, Mr. W. J. Bryan, declared themselves hostile to the Mexican Government, and refused to recognize General Huerta as Provisional-President of the Republic.

The attitude of the United States Government undoubtedly had the effect of prolonging the conditions which it, in common with the Governments of Europe, desired to see terminated. Nor were the difficulties which arose from this cause lessened by the fact that American statesmen appear unwilling to define their policy towards the sister Republic, and it is not easy to divine the direction in which they are aiming. But this much may be said, that if the Administration at Washington desired to bring Mexico to a condition of anarchy, its present methods are admirably calculated to produce that effect. These methods have had the effect of encouraging armed resistance to the *de facto* Government of Mexico, and led to a grave increase in the internal disorders that prevail.

CHAPTER XII

MEXICO CITY

THE City of Mexico is in many respects one of the handsomest and most attractive capitals in the world. By its situation, history, and traditions it occupies the leading position amongst the Latin-American capitals, and is second in population only to that of Buenos Ayres, the capital of the Argentine. It was founded by the Aztecs about the beginning of the thirteenth century, and has been the centre of Mexican government from that date until the present time.

Although the site is flat and undiversified, the fine vistas offered by the principal streets, with their dignified buildings, the splendid old cathedral and National Palace, standing in the tree-shaded Zocalo in the centre of the radiating thoroughfares, the magnificent Alameda, with its rich tropical vegetation, especially the purple bougainvilla, climbing to the tops of the highest trees, all combine to give the city an air of distinction and beauty rarely seen. The noble Paseo de la Reforma, which runs from near the Alameda to Chapultepec, takes its place among the most splendid thoroughfares of the world. It falls short of the impressive length of Pennsylvania Avenue in Washington, and there is lacking in some degree the stately magnificence and completeness of the Champs Élysées; but for nearly three miles it stretches flanked by smooth-shaven, tree-bordered lawns, its vast width relieved by great groups of artistic sculpture, classic monuments, and glowing parterres of brilliant flowers—a tribute to the cultivated tastes of the

VIEW OF THE ZOCALO AND CATHEDRAL, MEXICO CITY

ruling class in Mexico. From its wide surface at many points are to be seen some of the finest views the eye could wish to rest upon. The castle-crowned hill of Chapultepec, where Montezuma, the last of the Aztec kings, had his summer palace, fills the foreground. Beyond rises the vast ring of volcanic mountains that encircle the Valley of Mexico, with the snow-covered summits of Popocatapetl and Ixtaccihuatl dominating the scene.

The city stands nearly 8000 feet above sea-level, in a clear and radiant atmosphere, with a climate all the year round that reminds one of an ideal English month of May. It is a place of eternal and ever-beautiful spring, where "he who seeks the sun in the morning will seek the shade at noon." The city is a paradise of flowers. In the suburbs which have grown up within the last thirty or forty years every garden and fence and wall and house-front is a bower of bloom. Bougainvilla and roses flourish to perfection, and one sees the common ivy geranium climbing to a height of 20 or 30 feet, covered with a profusion of blooms. Small wonder, therefore, that in the peaceful days under President Diaz leisured American tourists, if such can be imagined to exist, bought houses and made their winter homes in the city. The disturbed conditions of the last three years have driven these migrants away, but Mexico only requires to be known, and to have settled and orderly government not only to grow immensely rich and prosperous, but to become one of the most delightful of tourist countries.

The Emperor Maximilian was the first who made any real effort to ornament and improve the capital. He converted the bare stone pavements of the old Plaza Mayor into the present tree-shaded Zocalo. He beautified Chapultepec and the Alameda, and taught the Mexicans that they could make their capital one of the most beautiful in the world if they only chose to avail themselves of its wonderful situation. But it

is to Porfirio Diaz that most of the improvements are due. Possessed of limitless power, endless patience, and great sagacity, the Iron President employed much of the surplus revenue which his wise administration produced in valuable public works for the adornment and improvement of the Mexican capital.

Under him the city was cleansed and drained, its streets paved, new thoroughfares opened out, handsome public buildings erected, and works adding to its dignity and beauty carried out. Many of these enterprises, like the new Parliament House and the splendid white marble National Theatre on the Alameda, were still in progress when his reign came to an end. All were at once suspended by President Madero, and the money turned to purposes which the most diligent investigation of the Treasury records fails to disclose. The new Parliament building still stands a rusty skeleton of steel and concrete, and the National Theatre is yet roofless; but the present Government, which inherits and is inspired by the Diaz tradition, proposes to finish these structures and to complete the other projects designed for the benefit of the citizens—if it can.

Despite the terrible events of February last, the memory of which is already fading, life in the city goes on without much change. The Avenida de San Francisco, the Regent Street of Mexico, is crowded in the early forenoon and in the evening (it is too hot in the midday hours) with shoppers and promenaders, just as it was in the days before the Madero revolution. Perhaps there are fewer Americans talking about mines and concessions, but otherwise there is little change. A continuous stream of motor-cars, and carriages drawn by fine horses—many of them driven by English coachmen—passes along the street; the entrance to the magnificent Jockey Club has its group of rich "hacendados" and "men of affairs" the same as before.

Lottery-ticket venders are as plentiful as street hawkers on Ludgate Hill at Christmas. Indeed, the promotion of lotteries seems the most flourishing of national industries. Towns, cities, states, even the Republic itself, resort to this means to raise money for all sorts of public purposes. It looks rather odd to the mere foreigner to find towns in the north which, according to the papers, are in the hands of the rebels, selling lottery tickets in the streets of the capital. Everybody buys them, because whatever else may be in doubt in this singular land there is never any defaulting in the payment of prizes drawn in a lottery. The Mexican does not mind changes of Government; revolutions now and then do not vex his soul; droughts and floods and earthquakes leave him almost unmoved; but if anything interfered with the regular supply of lottery tickets, or if—unthinkable thing!—the prizes failed to be paid, then indeed would the populace rise up in its wrath and demand a remedy for what was threatening the very foundation of the social fabric.

One hears a lot about the criminals of Mexico City, but life and property are probably just as secure in the capital as in any other large city in the world—provided always, of course, that no revolution is afoot in the streets. There are thieves and robbers there, and plenty of individuals who would not hesitate even at murder; but the same sort of people are to be found in London and Paris and New York, and in every other big city.

The police force of Mexico is a very efficient one, albeit its methods are different from those adopted in Europe. One peculiar feature is that there is no system of police patrols at night in any Mexican city. But the system adopted appears to be equally satisfactory. In Mexico the towns are all built in typical Spanish-American fashion, with the streets running at right angles to each other, so that the buildings stand in blocks like the squares on a chessboard. At every

street crossing a policeman is stationed, and every one carries a lamp. This he sets down in the middle of the roadway; and though he may move away from its immediate vicinity, the constable takes care always to keep his lamp in view.

If anyone can secure a police lamp and take it to the nearest station, he gets a reward of 10 pesos, equivalent to £1, and the policeman gets into serious trouble, besides having the reward deducted from his pay. Needless to say, the reward is seldom claimed. The Mexican policeman is as alert as a weasel, and as he is very handy with his revolver, even the "larkiest" of night-birds gives the lamp a wide berth, whether its owner is visible or not. One result of this system is that, while a burglar may pursue his avocation in peace in the middle of a block, he usually finds it impossible to escape with his booty.

If an alarm is given, the ends of every street are watched by a policeman, who does not hesitate to shoot if anyone attempts to pass without stopping when challenged. As an additional precaution, every constable at certain fixed intervals signals to his colleague at the next corner. If the signal—a thin wailing whistle, like a boatswain's pipe on a man-o'-war—is not returned, an alarm is given, and the district is at once closed until the reason for the silence is ascertained.

There is a good deal of social life in the city, and many of the older families still maintain the stately traditional customs of the Spanish period; but the practice of going out to dine at one or other of the fashionable restaurants in family parties, followed by a visit to the theatre, has become somewhat common in recent years. Perhaps the servant difficulty, which is as acute in Mexico as anywhere else, has a good deal to do with the change. Everyone complains of the laziness, dirtiness, and unreliability of their domestics. Every Mexican, even if he or she can scarcely scrape together sufficient rags to comply

with the requirements of decency, has a very proper pride and a high sense of personal dignity.

If the visitor has a sufficient knowledge of Spanish, the servant who attends to his wants will expect a patient hearing while the woes of servitude, and the loss of "honour" which it entails, are very fully recited. Laziness is really at the bottom of the whole reluctance to work, and in this respect the Mexican domestic is no whit better than when Madame Calderon de la Barca penned her letters in Mexico City. The description that lady gives of her washerwoman would fit anyone of the same profession in the capital to-day. "A decent old woman," she writes, "who came to the house to wash shortly after our arrival in this country, left at the end of the month *para descansar*. Soon after, she used to come with her six children, they and herself in rags, and beg the gardener to give her any odds and ends of vegetables he could spare. My maid asked her why, being so poor, she left a good place where she got twelve dollars a month. 'Jesus,' was the reply, 'if you only knew the pleasure of doing nothing!'" The "pleasure of doing nothing" is just as fully appreciated in Mexico City to-day, where it is considered much less degrading to beg than to enter domestic service. Indeed, the beggars appear to think they confer a favour when they give you an opportunity to bestow an alms, and do not hesitate to tell you, some of them, that it enables you to lay up treasures which may be found very consoling in the doubtful hereafter.

The fine public square known as the Zocalo forms the centre of the city, and around it some of the principal buildings are congregated. This square is about three hundred yards long, and about half that in width. Its eastern side is occupied by the great Cathedral of the Assumption, which is known as the Holy Metropolitan Church of Mexico. It is the largest and most impressive edifice in Spanish America, perhaps on the whole American continent. Its two great central towers

rise to a height of over 200 feet, and are the most conspicuous landmarks in the city. The building is 400 feet long and nearly 200 feet wide, constructed in the general form of a Greek cross, with two great naves, three aisles, and twenty-two side chapels, in which are some magnificent altars, almost barbaric in their profuse decoration of gold, marble, and precious stones.

The vaulted roof is supported by twenty Doric columns, enriched with carvings and gildings, and the walls of the church and the sacristies are adorned with many beautiful paintings by some of the most celebrated Spanish painters. Among these are several examples of the best work of Murillo. The general effect is one of massiveness and grandeur, and is very impressive.

According to historians, the Cathedral is built on the site of the great Teocali, or sacrificial pyramid, on which the Aztecs immolated their human victims. The foundations are said to be composed almost entirely of sculptured Indian images, which were destroyed when the Spaniards overthrew the ancient religion of the Aztecs. This tradition is borne out by the fact that some of the most valuable antiquities now stored in the National Museum, close by, were discovered at various times during excavations in connexion with repairs to the fabric. The chief of these is the famous Aztec Calendar Stone, a huge rectangular block of basaltic porphyry 22 feet in diameter, 3 feet thick, and weighing 24 tons. It was found deeply buried in the subsoil of the Zocalo, close to the Cathedral foundations. It is said that when it was unearthed the then Archbishop of Mexico, fearful lest the sight of the Stone might induce the Mexicans to revert to idol worship, caused it to be reburied. Towards the end of the eighteenth century it was again dug up, and set in the base of the west tower of the Cathedral, where it remained exposed to the action of the elements until 1885, when it was placed in the National Museum.

The Calendar Stone has the appearance of a somewhat irregularly shaped millstone. Its surface is carved in low relief with astronomical signs, which represent the Aztec system of chronology, though their interpretation is more or less a matter of doubt.

According to tradition, the Calendar Stone is said to have originally weighed nearly 50 tons, and was transported from the mountains beyond Lake Chalco.

"The fact that so enormous a fragment of stone could thus be safely carried for many leagues in the face of obstacles, and without the aid of cattle—for the Aztecs had no animals of draught—suggests to us no mean idea of the mechanical skill, and implies a degree of cultivation little inferior to that demanded for the geometrical and astrological signs displayed in the inscriptions on this very stone. It is a priceless relic of prehistoric days, and is supposed to throw much light on the chronological system of the Aztecs. By means of this Calendar the priests kept their own records, regulated the festivals and seasons of sacrifice, and made all their astrological calculations. The symbols show that they had the means of settling the hours of the day with precision, the periods of the solstices and equinoxes, and of the transit of the sun across the zenith of the City of Mexico.

"We cannot contemplate the astronomical science of the Mexicans, so disproportionate to their progress in other works of civilization, without astonishment. That they should be capable of accurately adjusting their festivals by the movement of the heavenly bodies, and should fix the true length of the tropical year with a precision unknown to the philosophers of antiquity, could be the result only of a long series of nice and patient observations evincing no slight progress in civilization. But whence could the rude inhabitants of these mountain regions have derived their curious erudition? Not from the barbarous hordes who roamed over the higher latitudes of the

North, nor from the more polished races on the Southern Continent, with whom, it is apparent, they had no intercourse." [1]

Another remarkable antiquity, now also in the Museum, is known as the "Sacrificial Stone." It was discovered buried near the south-west corner of the Cathedral atrium in December 1791. It was buried again, but was finally exhumed in November 1824, and placed in the Museum. This Stone, upon which the human sacrifices were offered to the Aztec gods, is a large block of very hard trachyte, 8¾ feet in diameter and 2¾ feet thick. The upper surface and the edge of the Stone are covered with figures sculptured in low relief. In the centre of its convex surface is a cup-shaped hollow 6 inches deep and 18 inches in diameter, which is supposed to have held the heart of the victim. The sculptures round the edge represent the act of sacrifice.

As mentioned in a previous chapter, the bodies of the victims were delivered to the warriors who had captured them in battle, and the flesh was cooked and eaten as part of the sacred rite. The number of victims offered on this block of stone is incalculable. According to Bishop Zumarraga, at least 20,000 were offered yearly in the capital alone. It was customary to preserve the skulls of the sacrificed in buildings appropriated to this purpose, and the companions of Cortes are said to have counted 136,000 skulls in a single one of these edifices. Many other relics connected with the worship of Huitzilopochtli, the tutelary deity of the Aztecs, have also been unearthed in the vicinity of the Cathedral, and are now included in the treasures of the Museum.

One thing which impresses the visitor to Mexico City is the excellent system of tramway communication, not only in the city itself, but out to distant suburbs. This system is credited with being one of the best organized in the world,

[1] Prescott, *Conquest of Mexico.*

NATIONAL PALACE, MEXICO CITY

and it certainly confers the boon of cheap and rapid transit on the people of Mexico City.

The Mexico Tramway is unique, in that not only does it convey the inhabitants on business and pleasure, but every citizen takes his last earthly ride in a tramcar to the cemetery. The Company has a monopoly of this service, and the dead are carried in specially built cars, called "carrozas." Owing to the city being gridironed with car-lines, none of the streets are more than a few hundred yards from the trams. When a person dies, the undertaker notifies the traffic superintendent at the Company's head-quarters that a funeral-car will be required at a certain hour at a specified point on the car-line, to convey a funeral to the cemetery. The undertaker's men carry the coffin along the street to the car, which then proceeds on its journey.

The extent and elegance of the funeral train, as in other lands, are arranged in accordance with the amount it is desired to expend on the ceremony. The cars employed for the carriage of the coffins vary in the richness and ornamentation of the draperies which surround it. Ordinary funerals usually consist of a coffin-car and a trailer for the mourners, but wealthy patrons will sometimes have as many as ten or a dozen cars to convey the mourners and their friends.

The funerals are worked in with the regular street traffic, and to the stranger it is a novel, even a startling spectacle to see a stately electric-motor hearse, followed by, it may be, half a dozen or more closed and funeral vehicles, passing swiftly along the tram lines to the cemetery. There are several large cemeteries in Mexico City and its suburbs, and the only means of access to them is by tramcar. The Company on an average carries out about forty funerals every day in the year, and has over fifty cars employed in this service alone.

It was interesting to find that the Mexico City tramways are owned and worked by a British Company which has its head-

quarters in Toronto, Canada, but its financial centre is in London, and most of its capital is held in England. The present Company is the successor of a number of minor tramway undertakings, which formerly held franchises for the operation of street railways in the city. These were of different gauges, and some used electricity while others employed mules as the motive power. In 1906 the present Company acquired possession of the various properties, and the whole of the lines were re-laid on a standard gauge and equipped for electric traction. In recent years the power has been obtained from the generating stations of the Mexican Light & Power Company, at Necaxa, a hundred miles away.

The Company is extending its sphere of operations far outside the city, and electric lines for the conveyance of both passengers and freight are being built to the cities of Toluca and Puebla. In each case the new line will reduce the time of the journey to these places to about a quarter of what it is by the existing steam railways. Both routes pass through most picturesque and attractive scenery, and are bound to develop a large tourist traffic, in addition to ordinary business, which is very considerable, and, with the improved facilities, will certainly increase. The Toluca line intersects a district where there are extensive pine forests capable of producing large quantities of lumber at present entirely unexploited.

The line to Puebla is already constructed for a distance of 14 miles from Mexico City, and is being rapidly pushed forward. It will undoubtedly be one of the most remarkable in the world. At one point where it crosses the saddle between the snow-clad peaks of Popocatepetl and Ixtaccihuatl, it attains a height of 14,600 feet above sea-level. This elevation is only 400 feet lower than the summit of Mont Blanc, the " Monarch of the Alps," and will make the new line the highest electric railway in existence. It follows the route taken by Cortes from Tlaxcala, when he marched to the conquest of Mexico nearly five

hundred years ago. Readers of Prescott's *Conquest of Mexico* will remember the graphic description of the difficulties and dangers of that famous march through the passes now soon to be traversed by the electric trains of the Mexico Tramways Company.

It would seem, therefore, that those who are most keenly interested in the welfare of the Mexican Republic are in no way despondent as to the future of that country, despite the troubles of the last two or three years. Their confidence will probably be justified. A remarkable proof of the vitality and soundness of Mexico's financial condition is given by the fact that during the last three years, despite all the revolutions and counter-revolutions that have gone on, the trade and revenues of the country have steadily increased. Mexico when the present disorders broke out was ripe for what—for lack of a more suitable word—is termed a "boom," and, with the re-establishment of settled conditions, those who have refused to lose faith will reap a rich reward for their confidence in the future of the Republic.

CHAPTER XIII

MEXICO AND THE UNITED STATES

Foreign relations—Attitude of the United States—Outlook for the future

THE existing conditions in Mexico (October 1913) constitute a veritable maelstrom of political confusion and active rebellion. The whole country is seething with disorder and discontent. The elections just held, instead of bringing order out of the chaos, have only added an additional difficulty and peril to the situation.

According to the Mexican Constitution, a certain percentage of the voters must poll in order to render an election valid. General Huerta, the Provisional-President, has just announced that this proportion was not reached, and therefore, as a new President was not chosen, he proposed to remain in office until a fresh appeal has been made to the electorate. His decision in this matter adds another serious item to a long catalogue of troubles, because the President of the United States, who has consistently refused to recognize General Huerta as President of the Mexican Republic, not only demands his immediate resignation, although no successor has been chosen to replace him, but he also declines to admit that the Congress elected on October 26 has been legally chosen, and has warned General Huerta not to convene it.

The veto of the United States Government, therefore, extends not only to the office of the President, but to the Parliament elected by the Mexican people, a degree of foreign inter-

ference which no nation claiming to be a free and independent State can possibly tolerate. Even the Americans themselves recognize that the action of the American Government with regard to Mexico is based on assumptions difficult to justify. A large body of people in the United States, and especially those interested in financial or commercial enterprises in Mexico, believe that the policy of President Wilson is a mistake. The *New York Times*, in a recent leading article, declares that—

"In refusing to recognize the Huerta Government in Mexico the Wilson Administration has gone contrary to what we believe to be public opinion in this country; it has certainly acted in a spirit contrary to that which Americans in Mexico believe would have been wise, and refusal to recognize Huerta has displeased the native Mexicans. It is now evident that some of the European Powers have become apprehensive of the consequences of the policy which President Wilson and Secretary Bryan have thus far pursued.

. . . . . .

"It has been felt here, and believed in Mexico, that the prompt recognition of Huerta would have given him such authority, strength, credit, and stability that he would have been much better able to cope with the elements of insurrection and disturbance in the Republic. Recognition by us would have been more potent than that of any more distant nation. The American Republic has had no direct knowledge of the grounds upon which President Wilson withholds recognition. The conjecture is that one reason was the assassination of Madero, and it has been intimated, but so far as we know without any authority, that it was feared in Washington that Huerta was doomed to a speedy overthrow. The first of these assigned reasons is quite inadequate, since the recognition takes account of the fact that a Government is established, not of the methods that have brought it into power. The

second reason has no force at all, as an early recognition would have fortified Huerta against his rivals and rebellion. . . . The reception accorded by Mr. Bryan some time ago to Americans having property at stake in Mexico was not reassuring. These gentlemen were so far convinced that the Secretary of State had the wrong point of view that they took their case to the President, but seemingly without satisfactory results."

The rebels in the North under the leadership of Señor Carranza were not slow in taking advantage of the attitude of President Wilson towards the Provisional-President of Mexico. There is something remarkably similar between the position taken up by the American President and that of the rebel leader. President Wilson has repeatedly demanded the resignation of General Huerta and of the members of his Cabinet, and has declared categorically that so long as any one of them remains in office the United States will not recognize the *de facto* Government of the Republic.

This is precisely the attitude of Señor Carranza and his supporters. In a personal statement published in the *New York Herald* on September 24, Señor Carranza uses almost identical language. He declared that—

> "The leaders of our party, as well as the officers and the last soldiers in our ranks, will not recognize either Huerta or any other person who may believe in these pretended elections, no matter who he may be. This is my position, and it is also that of the generals, chiefs, officers, and troops I have just reviewed in the States of Coahuila, Durango, Zacatecas, Chihuahua, Sinaloa, and Sonora. The constitutionalist chiefs of the rest of the States of the Republic, all of whom have pledged their support to me, also are in accord with this declaration.
>
> "It is quite useless to speak to us about peace negotiations. There can be no peace while Huerta and his fellow-conspirators remain in power. Our aim is to exterminate him and his whole following of traitors and assassins or to succumb ourselves, as the good patriots

which our country expects us to be. Peace is impossible until one party or the other shall have been exterminated.

"Referring to the elections which Huerta promises to hold in October next, I wish to declare that any citizen who shall be proclaimed to have been elected through the same, no matter who he may be, will be considered as a traitor to his country, and in case he falls into our hands will be tried under the laws of January 25, 1862, and the same treatment will be accorded to all who shall recognize him in such character."

This sinister threat has reference to the Law of 1862, promulgated by the Emperor Maximilian, under which he himself was subsequently put to death at Querétaro in 1868, and was directed against the Liberal Party under Benito Juarez, which was then in revolt against Maximilian. It provides that, anyone taking part in an uprising against the Constitutional Authorities or in any movement of a seditious nature shall be liable to capital punishment. Under this law many persons were then put to death, and a similar penalty has been inflicted in a great number of cases on both sides during the present troubles. The Federals are reputed, though without any reliable evidence to support the allegation, to execute civilians, officers, and common soldiers indiscriminately, while the Carranzistas undoubtedly put to death all officers from the rank of captain upwards, holding the view, apparently, that those beneath that grade are not sufficiently intelligent to be held responsible.

It will be observed, at least so far as the resignation of General Huerta or any Congress elected under his control is concerned, that the language of Señor Carranza is almost identical with that of President Wilson.

President Wilson's attitude is all the more difficult to understand, because at the present moment there is no government in Mexico except that carried on by General Huerta. It is rendered still more inexplicable by the fact that practically

all the Americans resident in Mexico, as well as the late United States Ambassador in that country, Mr. Henry Lane Wilson, have again and again expressed themselves in favour of the Huerta Administration as the only one likely to bring order out of the chaos that exists. American newspapers contain abundant evidence that, in the opinion of Americans with experience of Mexico, if the United States Government had recognized General Huerta, and had effectually prevented the traffic in arms with the rebels across the frontier, the present Mexican Government would have long since succeeded in suppressing the revolt and restoring normal conditions. But against the advice of his own Ambassador (who was recalled and dismissed from office) President Wilson and the Secretary of State, Mr. Bryan, have encouraged the rebels in the Northern States, and have taken up an attitude which has weakened, and almost entirely destroyed, the authority of the Provisional Government.

President Wilson has announced that he takes his stand upon the moral aspect of the question, and bases his refusal to recognize General Huerta on the ground that the establishment of the Huerta Government was brought about by revolution and the murder of his predecessor, Señor Madero. The President of the United States may, of course, have some special information upon this subject, but up to the present no authoritative account has ever been made public as to how Señor Madero met his death. According to the official report published in Mexico at the time, he was killed under the so-called "Law of Fugitives" while attempting to escape from the escort which was conveying him from the National Palace to a prison in Mexico City.

Some of the late Señor Madero's supporters who had fled to the United States have alleged that the late President was a dead man when he was taken from the National Palace and placed in the cab that was to take him to the Penitentiary

INDIAN MEMORIAL ON THE PASEO, MEXICO CITY

but the true facts as to that deplorable incident, and as to whether it was inspired by General Huerta, is still a matter of conjecture. It has also been advanced in support of President Wilson's attitude that the election of General Huerta to the Provisional Presidency of the Republic was unconstitutional and illegal, because only 90 out of the 124 Deputies necessary to make the election valid were present at the meeting of Congress which approved of his appointment, and that some of these Deputies were brought to the Parliament House and compelled to vote by physical force. Whatever may be the grounds on which President Wilson and the United States Government base their action, it is evident they are resolutely determined to refuse to recognize General Huerta or his Government, or even to allow any member of the latter to remain in public life in Mexico.

One unpleasant feature of the situation as between the United States and Mexico—at least so far as Great Britain is concerned—is that there is a party in the United States whose opposition to General Huerta is based on the assumption that his Government was rendered possible by the support of British interests in Mexico, and that they are bound, as a matter of policy, to oppose it.

There are three parties in the United States actively concerned in the opposition to the Huerta Administration. One has been already referred to: the others are, first, those who desire to bring about military intervention at any cost; and secondly, the section who do not desire the United States to intervene at once directly in Mexican internal affairs at first, but whose plan it is to induce some of the Northern Mexican States, particularly Sonora, Chihuahua, Coahuila, Nuevo Leon, and Tamaulipas, and possibly Sinaloa, Durango, and Zacatecas, to secede from Mexico to the United States. If Mexico allowed them to go peaceably, well and good, but if an effort should be made to retain them in their old allegiance then this third party

would require the United States to take up arms and complete the severance.

Several attempts have been made to bring this scheme to a head. Inspired reports have appeared again and again in American newspapers to the effect that the rebel leaders in Northern Mexico were about to proclaim the independence of the States mentioned and demand their annexation to the United States. But the rebels have not yet taken this step. Mexican patriotism, lukewarm, feeble, and almost negligible as it is, would not brook anything so flagrant as this, and Carranza and his supporters have so far declined to act upon the hints so broadly given by their friends across the border. On the contrary, Carranza has recently declared that he and his followers would oppose to the utmost of their power American intervention in any form.

It would probably be an excellent thing for the Mexican States if they were annexed by their great Northern neighbour, but there is still some trace of international equity and justice left among the nations, though it may be hard to find. Besides, such accomplished students of the Scriptures as President Wilson and Mr. Bryan would surely ponder long before removing a neighbour's landmark, even if that neighbour's own men, while temporarily on strike, helped in the removal. This particular plan, therefore, may be left out of consideration, if for no other reason than that Señor Carranza has greater ambitions than to be a mere Governor of a State in the American Union. He aims at being President of Mexico.

A considerable party undoubtedly exists in the United States who would wish to see their Government intervene by force of arms in the Mexican imbroglio, but this step is one which the authorities at Washington would be very reluctant to undertake, although, so far as can be seen at present, no party in the Southern Republic appears to be able to obtain control of the situation. There is reason to fear that Mexico, if left to

itself, will be brought to a position of absolute anarchy, and the United States may eventually be forced to intervene whether it wishes to or not.

The United States has too great an interest in the welfare of the sister Republic to permit such a state of affairs to come about. It has been stated officially that American investments in Mexico amount in the aggregate to $1,057,000,000, and that over 50,000 United States citizens are shareholders in the enterprises represented by this vast sum. No one section of the United States has a monopoly of investment in Mexican undertakings. New York, naturally, as the financial capital of the Republic, has the largest share, but Pittsburg, St. Louis, Kansas City, Boston, Columbus (Ohio), Cincinnati, Denver, San Francisco, and other cities, are also largely concerned. American enterprises have been established throughout the whole of Mexico. Many American citizens have taken up their residence permanently in the Republic, and have engaged in mining, agriculture, fruit growing, and similar industries. In Mexican railroads alone American investments total $644,000,000; in mines and smelters they exceed $250,000,000, and oil and rubber about $30,000,000; in lumber industries about $8,000,000; and in factories, stores, and agriculture, the amount is said to exceed $25,000,000. All this capital has been fruitfully employed, and the developments which it has brought about are only in their beginning. When peace is again established there will be a tremendous development in Mexico, because its resources have really only begun to be exploited.

But America is not the only foreign country which is interested in the welfare of the Republic. British capital to the extent of about £80,000,000 sterling is also invested there, and France, Germany, and Spain have interests amounting to many millions. The Governments of these countries cannot afford, any more than can the United States, to stand idly by

and see the interests of their subjects destroyed by a continuance of the present situation. They are hampered, however, by the policy of the Monroe Doctrine, which is directly opposed to the interference of European Powers in the affairs of the Latin-American republics. But if the United States insists upon the Monroe Doctrine, on her must devolve the task of intervention to put an end to the disorders in Mexico.

President Roosevelt, on one occasion, declared that "chronic disorder" in any of the republics on the American continent would justify the intervention of the United States. Just how long it takes for disorder to become "chronic" is a matter of interpretation. For three years the internal conditions of Mexico have been going from bad to worse. Some people have not hesitated to say that these disorders have been deliberately fomented from the United States, with the object of bringing about conditions which would compel intervention.

It is not conceivable that this is the case; but the conditions are such at the present time that, unless some change takes place, the United States will very soon be compelled to intervene, not only to protect the interests of her own subjects, but because, under the Monroe Doctrine, she has made herself responsible for the preservation of order on the American continent. She cannot, therefore, much longer permit the continuance of the disorder and rebellion now existing in Mexico, which is at its very worst in the States along her own frontier.

The interference with the trade relations that exist between the two countries has been of a very serious character, so far as railway traffic is concerned. From February 1913 until the present time, railway communication across the frontier has been almost completely interrupted. The consequences of this state of affairs are beginning to make themselves felt in business circles in New York and other States. Already several firms

doing business with Mexico have been reduced to bankruptcy. The railways running south from the United States border will be forced to pass their dividends, and the financial situation must continue to deteriorate unless a change is speedily brought about.

It must be pointed out, however, that Americans not immediately interested in the problem that presents itself speak very cynically of what is going on in Mexico. One influential United States newspaper, the *Louisville Courier-Journal*, quite recently wrote :—

> "There is little really to choose between the Mexican factions. Politics in that wretched country is mainly brigandage tempered by the fortunes of battle. For a while, at least, it were best to lift the embargo and let them fight it out among themselves. If we have to intervene, the conditions will be better for us when the Mexicans are exhausted.
>
> "Meanwhile, we owe nothing to the lives and properties of the Americans who are still there. They went of their own account. They did not go for their health, but for gain. They took the chances with their eyes open. We should do what we can for them ; but that does not argue or imply the sending of an army to rescue them from a perilous predicament of their own making."

The embargo to which reference is made in the foregoing extract relates to the supposed prohibition of the export of arms from the United States to Mexico. This trade has been prohibited by order of the United States Government, but it is well known that it still goes on practically without interference.

Mr. Stephen Bonsal, a well-known American publicist, writing in the *New York Sun* on August 24, with reference to this subject, says :—

> "As a matter of fact they are getting all the arms they can handle both across the border and through the

> silted-up port of Matamors, which they [the followers of Señor Carranza] apparently hold; but the real trouble seems to be that when the arms are distributed these fervent soldiers of liberty turn their backs upon their Constitutional leaders and, carried away by the joys of 'la vida libre,' loot, burn, and harry at their own pleasure and for their personal profit. It may be said of these good people that at least they are no respecters of persons, and the lands of the Maderos are being devoured by these human locusts just as the lands of the Creels and the Terrazas were not spared when Madero was in the saddle."

From the European point of view, so far as the internal peace and welfare of Mexico and her people are concerned, there is little doubt but that United States intervention would, after a certain period, be the very best thing that could happen, especially if it were followed by the establishment of something in the nature of a Protectorate over the Mexican Republic similar to that which is exercised over the Republic of Cuba. The United States would then become a guarantor for the maintenance of peace and settled conditions, and whatever injury might be inflicted upon the national sentiments of Mexicans, the material prosperity of the country and her people as a whole would benefit enormously from the new order of things that would be bound to result.

The Government of the United States fully recognizes the magnitude of the task that intervention would entail. It is evident from the declarations of the leaders of all parties in Mexico that intervention would at once induce them to sink their own differences and combine against the invader. Nothing is more certain about the Mexican than his anti-American feeling. He may be a Huertista, a Carranzista, a Zapatista, or even a "Fulanista" (for "anybody"), but the leader who secures his adhesion for the time being must at any rate be a Mexican. However much they may differ about the conduct of their national affairs, every Mexican who can carry a

musket would attach himself to the so-called patriotic "Liga de Los Ultimos Defensores de la Patria" (The League of the Last Line of Defence of the Fatherland). Señor Carranza, as well as General Huerta, and even old General Porfirio Diaz, in his European seclusion, have declared that intervention would lead to an immediate combination of all Mexicans.

This state of feeling, which is perfectly well known to the United States Government, may well make President Wilson proceed very carefully in his endeavour to clear up the tangled situation which exists in the Southern Republic. But if it becomes apparent—and conditions all point in that direction—that the Mexicans are unable to compose their own quarrels, it will in the end become necessary for the United States to send troops across the frontier.

The task before them would not be very easily accomplished. Mexico is nearly as large as the whole of Europe, excluding Russia. It is in many places a rugged, mountainous country with dense forests covering large areas, where guerrilla warfare could be carried on almost interminably.

There is a considerable railway system in the Republic connecting Mexico City with the Gulf ports and the United States, but the 15,000 odd miles of line in existence are very inadequate when the size of the country is borne in mind; and the physical configuration of Mexico, which necessitates the existence of many large bridges and viaducts, renders it very easy to interrupt railway communications. Apart from the railway lines, the other means of communication in Mexico are very indifferent. The ordinary roads are mere tracks, which would speedily become impassable for troops in bad weather.

The only circumstance in favour of an invading army is that the capital of Mexico and most of the large towns and cities are situated on the plateau in comparatively open country, or on the coast, where they are open to attack from

the sea. To this may be added the fact that the Mexican Army is poorly equipped and badly trained, and the soldiers serve under a system of compulsory service, which renders desertion a common incident, and one to which no particular dishonour attaches. During the past three years endless instances have occurred in which beaten troops have cheerfully gone over to the enemy. Federal troops in case of defeat often join the rebels, and the rebels in corresponding circumstances are incorporated with equal ease in the Government regiments. Nor is it an uncommon experience to find small detachments of Government troops in remote districts unconcernedly abandoning their allegiance and taking to brigandage and pillage on their own account.

Such occurrences are only to be expected in an army which practically consists of the criminals of the country, as was more fully explained in the chapter dealing with the methods of recruiting for the Mexican Army.

An army composed of such materials, and with these traditions, is hardly likely to put up a very strenuous fight against ordinary troops. It is probably true to say that a United States Army of 50,000 men could march anywhere it pleased throughout Mexico with comparatively little opposition.

Mexico City could be occupied within a month of the date of intervention, but the war would only be beginning. The Mexican soldier, though not much inclined for an encounter in the open, unless he feels the odds to be heavily in his favour, makes an excellent guerrilla warrior. He is hardy, and can subsist on the most meagre fare; he is a brigand by inclination, and has a natural instinct for irregular warfare. As the local population would everywhere be on his side, he would be well supplied with information, and with such resources as the country afforded, so that the conflict might be carried on for years.

The French troops in the 'sixties of last century had a

bitter experience of the capacity of the Mexican for guerrilla warfare. The French Army numbered about 200,000 men, and though they held all the principal towns and strategical positions, they were subjected to serious losses by the action of the guerrillas, and practically only had control in those places where large garrisons were maintained. Their communications were constantly being interrupted; small parties were cut off; convoys were captured and destroyed, so that the lives of the French troops were rendered miserable by the continuous harassing to which they were subjected by an enemy who could never be brought to battle.

A similar experience, though perhaps not on quite so extensive a scale, awaits the United States Army in the event of intervention. But the United States, unlike Napoleon III in 1867, cannot afford to withdraw from the task before her, and will be bound to carry the work through to the end. It is difficult to estimate what this would entail, but it is probably no exaggeration to say that it would require at least a quarter of a million men to be maintained in Mexico on a war footing. The conflict might last for a decade or even longer, and the cost entailed would be incalculable.

This is all perfectly familiar to President Wilson, and it is certain that he will only intervene when all other means have failed to bring about a settlement of the internal conditions in Mexico. At the same time, the obligation on the United States to act, in the last resort, will be imperative, not only because of her insistence upon the principles of the Monroe Doctrine, but also because, rightly or wrongly, the prolongation of the troubles is directly attributed by many Mexicans to the non-recognition of the Huerta Government. And this view, as already indicated, is shared not only by Mexicans, but by the representatives of many corporate and private American interests in the Republic. These have not hesitated to inform both President Wilson and Mr. Bryan that, had the

United States Government recognized the Administration of General Huerta at the time he became Provisional President, the country would to-day be at peace.

At that time the Maderistas, or Carranzistas, or whatever term may be applied to them, were greatly disheartened. They were comparatively few in number, without cohesion or organization, and were indifferently supplied with arms and ammunition. The tragic events in the capital in February had alarmed and shocked even the callous Mexican people, and the country would gladly have welcomed a cessation of the disorders. But the encouragement given to the opponents of the new Administration and the succour they received from across the border, together with the refusal of President Wilson to recognize General Huerta, induced them to hold out for a time. The unrest and discontent that perennially prevails amongst the poorer classes in Mexico induced many of them, after a time, to throw in their lot with the rebels, and a situation which might easily have been coped with at the moment eventually assumed the serious proportions which it now presents.

The opposition of the United States Government made it very difficult for General Huerta and his Administration to obtain the money necessary to enable him to deal with the revolts and sporadic disorders that broke out everywhere during the summer. Had President Wilson chosen, there were abundant precedents in the past relations between the United States and Mexico for his guidance. A condition not unlike that which prevailed in the spring of the year existed at the time when General Porfirio Diaz overthrew his predecessor, President Lerdo, and set up a Provisional Government. For more than a year the United States Government refused to recognize Diaz, on the ground that, while the United States Government " was accustomed to accept and recognize the results of popular choice in Mexico, and not

to scrutinize too closely the regularity or irregularity of the methods by which they were brought about," in the present case it would wait before recognizing General Diaz as President of Mexico " until it shall be assured that his election is approved by the Mexican people, and that his Administration is possessed of stability to endure and to comply with the rules of international comity."

General Diaz after a time satisfied the United States Government in these respects, and he was recognized as the President of Mexico. If President Wilson had followed the precedent set by his predecessor, there is every reason to believe that General Huerta would have been able to comply with the conditions laid down in the above quotation.

President Wilson, however, took up an irreconcilable attitude, and determined not to recognize General Huerta in any circumstances, or to admit the legality of any elections held under his control. In this he was supported by Senator Bacon, Chairman of the Foreign Relations Committee of the United States Senate, who has throughout been an active opponent of recognition. Señor Bacon has gone so far as to declare that the recognition of General Huerta would " put a premium on revolution and be an incentive to every revolutionary leader to asassinate the head of the nation with a full expectation that his act would receive the approval and official recognition of other nations."

This exaggerated view appears to have been fully endorsed and accepted by President Wilson, and the continuance of the disorders in Mexico is the direct result of it.

Fears have been expressed that in the event of United States intervention in Mexico there will be a general massacre of Americans resident in that country. No doubt there might be individual murders and assassinations of American subjects, but it is in the last degree unlikely that anything in the nature of a general massacre would take place. Mexican

although a very turbulent, and even bloodthirsty, people, are not absolute savages, and they have a wholesome dread of the retaliation which they know would inevitably ensue if anything in the nature of a wholesale slaughter of United States subjects was attempted.

The panic advice which was given by President Wilson, and earlier by President Taft, to Americans to clear out of Mexico was the greatest disservice that could have been rendered to them. In the case of President Taft's advice, it has been proved that it was wholly unjustifiable, and the same will no doubt eventually prove itself to be the case with regard to that of President Wilson. If Dr. Wilson had been possessed of accurate knowledge of Mexican affairs, he would have been aware that Americans — like the subjects of other nations resident in Mexico—are, on the whole, secure from molestation so long as they abstain from direct interference in local affairs. Of course the incidents arising from the action of brigands and outlaws are excluded from this statement, which only refers to the general attitude of the Mexican people. If the President's advice be taken, and United States citizens clear out of Mexico, a new difficulty will be created when a final settlement comes. What has been described by Mr. Percy F. Martin in an article in an influential English review as "the panic diplomacy of President Wilson" has, as Mr. Martin points out, irremediably wounded the susceptibilities of Mexicans, but "not only has entailed incalculable finanical losses upon those nervous Americans who permitted themselves to be influenced by it, and who no doubt—backed by the United States Government State Department—will have the effrontery to capitalize these losses and demand compensation from the Mexican Government at a future date."

The citizens of other States resident in Mexico have suffered losses, and have been placed in some degree of personal

risk, as well as those of the United States, but there has been no panic command given to them to leave the country as speedily as possible. President Wilson, in the policy he adopted in this matter, may have been influenced by his knowledge of the psychology of the people of the United States. They are subject to very remarkable outbursts of sentimental public opinion. These might, to use an American expression, be described as national "brain storms." Nothing, in certain circumstances, would excite these more quickly than reports of the murder of American citizens in Mexico, and the United States Government might find itself face to face with a popular demand for intervention which it could not possibly refuse.

If the Republic thus found itself engaged in a campaign in Mexico, which involved, as it certainly would, an enormous expenditure of blood and treasure, the cry for "intervention" might speedily become a demand for "annexation." This demand would be based partly on a claim for compensation for the effort that had been made, and partly as a guarantee against any possible necessity for its renewal in the future; but its strength, if it once got hold of the imagination of the people, would be such as no Administration in the United States could withstand. The whole situation as between the two Republics is fraught with grave peril to both, and the manner in which it is being handled at Washington is not calculated to reassure those who hope for a peaceful solution of the difficulties which now beset Mexico.

APPENDIX

MEXICAN CONSTITUTION

Sanctioned and Sworn by the General Constituent Congress the 5th Day of February 1857

IGNACIO COMONFORT, Substitute President of the Mexican Republic to its inhabitants. Know ye :

That the extraordinary Constituent Congress has decreed the following :—

In the name of God and by the authority of tne Mexican people.

The Representatives of the different States, of the District, and of the Territories which compose the Republic of Mexico, called upon by the provisions of the " plan " proclaimed in Ayutla the first of March eighteen hundred and fifty-four, amended in Acapulco the eleventh day of the same month and year, and by the summons issued the seventeenth of October eighteen hundred and fifty-five, to convene for the purpose of framing a Constitution for the nation and making it a popular, representative, democratic republic, exercising the powers with which they are vested, do hereby comply with the requirements of their high office by decreeing the following :—

CONSTITUTION

OF THE MEXICAN REPUBLIC ON THE INDESTRUCTIBLE BASIS OF ITS LEGITIMATE INDEPENDENCE, PROCLAIMED THE 16TH OF SEPTEMBER 1821

TITLE I

SECTION I

THE RIGHTS OF MAN

ARTICLE 1. The Mexican people recognize that the rights of man are the basis and the object of social institutions. Consequently they declare that all laws and all the authorities of the country must respect and maintain the guaranties which the present Constitution establishes.

The State and Church are independent of each other.

The Congress shall not enact laws establishing or prohibiting any religion.

ARTICLE 2. In the Republic all are born free. Slaves who set foot upon the national territory recover, by that act alone, their liberty, and have a right to the protection of the laws.

Marriage is a civil contract. It and all other acts of the civil status of persons are of the exclusive cognizance of the officials and authorities of the civil order (*del órden civil*), in the terms prescribed by the laws, and shall have the force and effect which the laws give them.

ARTICLE 3. Instruction is free. The law shall determine what professions require a diploma for their exercise, and what requisites are necessary to obtain said diplomas.

ARTICLE 4. Every man is free to engage in any honourable and useful profession, industrial pursuit, or occupation suitable to him, and to avail himself of its products. The exercise of this liberty shall not be hindered except by judicial sentence when such exercise attacks the rights of a third party, or by executive order issued in the manner specified by law, when it offends the rights of society.

ARTICLE 5. No one can be obliged to render personal

service without just compensation, and without his full consent, except work imposed as a penalty by judicial authority.

In regard to public service, that of bearing arms can only be obligatory, and the electoral functions, municipal offices, and the duties of jury service, obligatory and gratuitous, in the terms established by the respective laws. The State cannot permit effect to be given to any contract, pact, or agreement having for its object the restraint, the loss, or the irrevocable sacrifice of the liberty of man, whether on account of work, of education, or of religious vows. The law, therefore, does not recognize monastic orders, and cannot permit their establishment, whatever be the denomination or object for which they are sought to be established. Neither shall any contract be permitted in which a man stipulates for his own proscription or exile.

ARTICLE 6. The expression of ideas shall not be the object of any judicial or executive investigation, except in case it attacks morality, the rights of a third party, provokes crime or misdemeanour, or disturbs public order.

ARTICLE 7. The liberty to write and to publish writings on any subject is inviolable. No law or authority shall establish previous censorship, or require authors or printers to give bond, or restrict the liberty of the press, which has no other limits than respect of private life, morality, and the public peace. The crimes which may be committed by means of the press shall be tried by the competent Tribunals of the Federation or by those of the States, of the Federal District, and Territory of Lower California, according to their penal legislation.

ARTICLE 8. The right of petition, exercised in writing in a peaceful and respectful manner, is inviolable; but in political matters only citizens of the Republic may exercise it. To every petition an answer shall be given in writing, in the form of a decree by the official to whom it may have been addressed, and the said official is bound to make the petitioner acquainted with the result.

ARTICLE 9. No one shall be deprived of the right to peaceably associate or unite with others for any lawful purpose;

but only citizens of the Republic are permitted to take part in the political affairs of the country. No armed reunion has the right to deliberate.

ARTICLE 10. Every man has the right to possess and carry arms for his security and legitimate defence. The law shall designate what arms are prohibited, and the punishment to be incurred by those who carry them.

ARTICLE 11. Every man has the right to enter and leave the Republic, to travel through its territory, and change his residence, without the necessity of a letter of security, passport, safe conduct, or other similar requisite. The exercise of this right shall not affect the legitimate faculties of the judicial or executive authorities in cases of criminal or civil responsibility and to the limitations imposed by the law upon emigration, immigration, and the general health of the country.

ARTICLE 12. No titles of nobility or prerogatives or hereditary honours are or shall be recognized in the Republic. Only the people, legitimately represented, may decree recompenses in honour of those who have rendered or may render eminent services to the country or to humanity.

ARTICLE 13. In the Mexican Republic no one shall be tried according to special laws or by special tribunals. No person or corporation shall have privileges or enjoy emoluments which are not in compensation for a public service and established by law. Military jurisdiction shall be recognized only for the trial of criminal cases having strict connexion with military discipline. The law shall clearly set forth the cases included in this exception.

ARTICLE 14. No retroactive law shall be enacted. No person shall be tried or sentenced except under laws previously enacted, exactly applicable to the case and by a tribunal previously established by law.

ARTICLE 15. No treaty shall be made for the extradition of political offenders or of offenders of the common class who have been slaves in the country where the offence was committed, nor shall any agreement or treaty be entered into which abridges or modifies the guarantees and rights which this Constitution grants to the man and to the citizen.

ARTICLE 16. No one shall be molested in his person, family, domicile, papers, or possessions, except by virtue of an order in writing of the competent authority, setting forth the legal grounds upon which the measure is taken. In cases of *in flagrante delicto* any person may apprehend the offender and his accomplices, placing them without delay at the disposal of the nearest authorities.

ARTICLE 17. No one shall be arrested for debts of a purely civil character. No one shall exercise violence in order to enforce his rights. The tribunals shall always be open for the administration of justice, which shall be gratuitous, judicial costs being consequently abolished.

ARTICLE 18. Imprisonment shall take place only for crimes deserving corporal punishment. In any stage of the case in which it shall appear that such a punishment cannot be inposed upon the accused, he shall be set at liberty on bail. In no case shall the imprisonment or detention be prolonged for failure to pay fees, or any other pecuniary charge.

ARTICLE 19. No detention shall exceed the term of three days, unless justified by a warrant, issued in accordance to law, and giving the grounds for the imprisonment. The mere lapse of said time shall render the authority that orders or consents to it, and the agents, ministers, wardens, or jailers who execute it, responsible therefor. Any maltreatment in the apprehension or in the confinement of the prisoners, any molestation which may be inflicted without legal ground, or any tax or contribution in the prisons, is an abuse which the laws must correct and the authorities severely punish.

ARTICLE 20. In every criminal trial the accused shall have the following guarantees :—

i. That the grounds of the proceedings and the name of the accuser, if there shall be one, be made known to him.

ii. That his preliminary examination be made within forty-eight hours, to be counted from the time he may be placed at the disposal of the judge.

iii. That he be confronted with the witnesses who testify against him.

iv. That he be furnished with all the information on record which he may need for his defence.

v. That he may be heard in his defence, either personally or by counsel, or by both, as he may desire. In case he should have no one to defend him, a list of official counsellors shall be shown to him, in order that he may choose one or more to act as his counsel.

ARTICLE 21. The imposition of penalties properly so called belongs exclusively to the judicial authority. The political or executive authorities shall only have power to impose fines and imprisonment as disciplinary measures, the former of no more than five hundred dollars, and the latter for no more than one month, in the cases and in the manner which the law shall expressly determine.

ARTICLE 22. Punishments by mutilation and infamy, by branding, flogging, beating with sticks, torture of whatever kind, excessive fines, confiscation of property, or any other penalties, unusual or working corruption of blood, shall be for ever prohibited.

ARTICLE 23. The penalty of death for political offences is abolished. It can only be imposed, in regard to other crimes, upon the traitor to his country in foreign wars, upon the parricide, upon the murderer by treachery, with premeditation or for profit, upon kidnappers, highwaymen, pirates, and those guilty of grave offences of the military order.

ARTICLE 24. No criminal case shall have more than three instances. No person, whether acquitted or condemned, shall be tried again for the same offence. Verdicts of not proven are abolished.

ARTICLE 25. Correspondence sent through the mails is inviolable. The violation of this guaranty is an offence which the law shall punish severely.

ARTICLE 26. In time of peace no soldier may demand quarters, supplies, or other real or personal service, without the consent of the proprietor. In time of war he may do so, but only in the manner prescribed by the law.

ARTICLE 27. Private property cannot be occupied without the consent of the owner, except in cases of public utility, and with previous compensation. The law shall prescribe the

authority which shall make the expropriation in such cases, and the requisite for its exercise.

Religious corporations and institutions, of whatever character, denomination, duration, or object, and civil corporations which are under the patronage, direction, or administration of the former, or of the ministers of any sect, shall have no legal capacity to acquire the ownership of or to administer any other real estate than the buildings which are destined immediately and directly to the service or purpose of such corporations or institutions. Neither shall they acquire or administer funds secured by real estate.

Civil corporations and institutions, other than as above prohibited, may acquire and administer, besides the foregoing buildings, such real estate and funds charged upon it as may be required for their support and for the purpose for which they exist, but subject to the requisites and limitations which may be prescribed by the federal law which the Congress of the Union may enact for the purpose.

ARTICLE 28. There shall be no monopolies of any kind, whether governmental or private, nor prohibitions whatever, even if under cover of protection to industry. The Government's exclusive right to coin money and manage the postal service, and the privileges which, for a limited time, the law may concede to inventors or improvers of inventions, are exceptions to this rule.

ARTICLE 29. In cases of invasion, grave disturbance of the public peace, or any other emergency which may place society in grave danger, the President of the Republic, and no one else, shall have the power to suspend, with the advice of the Council of Ministers and with the approval of the Congress of the Union and, in the recess thereof, of the Permanent Committee, the guarantees established by this Constitution, excepting those relating to the life of man; but such suspension, which in no case shall be confined in its effects to a particular individual, shall be made by means of a general order or decree, and only for a limited time.

If the suspension takes place during the session of Congress, this body shall concede the authorizations which it may

deem necessary in order that the Executive may properly meet the situation. If the suspension takes place during the recess, the Permanent Committee shall, without delay, call Congress to assemble in order that it may make the concession.

SECTION II

MEXICANS

ARTICLE 30. Mexicans are:

i. All those born, within or without the Republic, of Mexican parents.

ii. Foreigners naturalized in conformity with the laws of the Federation.

iii. Foreigners who acquire real estate in the Republic, or have Mexican children, if they do not declare their intention to retain their nationality of origin.

ARTICLE 31. It is the obligation of every Mexican:

i. To defend the independence, the territory, the honour, the rights, and the interests of his country.

ii. To render his services in the Army or National Guard, according to the respective organic laws.

iii. To contribute to the public expenses, as well of the Federation as of the State and Municipality in which he lives, in the proportional and equitable manner which the laws shall prescribe.

ARTICLE 32. Mexicans shall be preferred under equal circumstances to foreigners, for all public employments, charges, or commissions, when the citizenship is not indispensable. Laws shall be enacted to improve the condition of industrious Mexicans, by rewarding those who distinguish themselves in any science or art, promoting labour, and founding colleges and manual training schools.

SECTION III

FOREIGNERS

ARTICLE 33. Foreigners are those who do not possess the qualifications determined in Article 30. They have a right to

the guarantees established by Section I, Title I, of the present Constitution, except that in all cases the Government has the right to expel pernicious foreigners. They are under obligation to contribute to the public expenses in the manner which the laws may provide, and to obey and respect the institutions, laws, and authorities of the country, subjecting themselves to the decisions of the tribunals, without power to seek other protection than that which the laws concede to Mexican citizens.

SECTION IV

MEXICAN CITIZENS

ARTICLE 34. Citizens of the Republic are all those who, in addition to the quality of Mexicans, have the following qualifications:—

i. To have completed the age of eighteen years if they are married, or of twenty-one if not married.

ii. To have an honest means of livelihood.

ARTICLE 35. The prerogatives of the citizens are:

i. To vote at popular elections.

ii. To be eligible for any office or position of popular election, and to be appointed to any other employment or commission, if they have the qualifications established by law.

iii. To associate together to discuss the political affairs of the country.

iv. To take arms in the Army or National Guard in defence of the Republic and its institutions, in the terms prescribed by law.

v. To exercise in all cases the right of petition.

ARTICLE 36. It shall be the duty of every citizen of the Republic:

i. To register in the list of the inhabitants of the municipality in which he lives, stating the property which he owns, if any, or the industry, profession, or labour by which he subsists.

ii. To enlist in the National Guard.

iii. To vote at popular elections in the district to which he belongs.

iv. To fill the federal offices to which he may be elected, and which in no case shall be gratuitous.

ARTICLE 37. The character of citizen is lost:

i. By naturalization in a foreign country.

ii. By officially serving the Government of another country or accepting its decorations, titles, or employment without previous permission from the Federal Congress—excepting literary, scientific, and humanitarian titles, which may be accepted freely.

ARTICLE 38. The law shall determine the cases and the form in which the rights of citizenship may be lost or suspended, and the manner in which they may be regained.

TITLE II

SECTION I

NATIONAL SOVEREIGNTY AND FORM OF GOVERNMENT

ARTICLE 39. The national sovereignty is vested essentially and originally in the people. All public power emanates from the people, and is instituted for their benefit. The people have at all times the inalienable right to alter or modify the form of their government.

ARTICLE 40. It is the will of the Mexican people to constitute themselves into a democratic, federal, representative Republic, consisting of States, free and sovereign in all that concerns their internal government, but united in a federation according to the principles of this fundamental law.

ARTICLE 41. The people exercise their sovereignty through the Federal powers in the matters belonging to the Union, and through those of the States in the matters relating to the internal regime of the latter. This power shall be exercised in the manner respectively established by the Constitutions both Federal and State. The latter shall in no case contravene the stipulations of the Federal compact.

SECTION II

INTEGRAL PARTS OF THE FEDERATION AND NATIONAL TERRITORY

ARTICLE 42. The national territory comprises the integral parts of the Federation and the adjacent islands in both oceans.

ARTICLE 43. The integral parts of the Federation are: the States of Aguas Calientes, Campeche, Coahuila, Colima, Chiapas, Chihuahua, Durango, Guanajuato, Guerrero, Hidalgo, Jalisco, Mexico, Michoacan, Morelos, Nueva Léon, Oaxaca, Puebla, Querétaro, San Luis Potosi, Sinaloa, Sonora, Tabasco, Tamaulipas, Tlaxcala, Valle de Mexico, Vera Cruz, Yucatan, Zacatecas, the Territory of Baja California (Lower California), the Territory of Tepic (formed from the seventh canton of Jalisco), and the Territory of Quintana Roo.

The Territory of Quintana Roo shall be formed from the eastern portion of the peninsula of Yucatan, which latter shall be bounded by a dividing line which, starting from the north coast of the Gulf of Mexico, follows the arch of the meridian 87° 32′ (longitude west from Greenwich) to its intersection with the 21st parallel, and thence continues until its juncture with the parallel which passes through the tower south of Chemax, twenty kilometres to the east of this point; and proceeding thence to the vertex of the angle formed by the lines which divide the States of Yucatan and Campeche, near Put, thence southward to the parallel forming the boundary between the Republics of Mexico and Guatemala.

ARTICLE 44. The States of Aguas Calientes, Chiapas, Chihuahua, Durango, Guerrero, Mexico, Puebla, Querétaro, Sinaloa, Sonora, Tamaulipas, and the Territory of Lower California, shall preserve the limits which they now have.

ARTICLE 45. The States of Colima and Tlaxcala shall preserve in their new character of States the limits which they had as Territories of the Federation.

ARTICLE 46. The State of the Valley of Mexico shall consist of the territory constituting at present the Federal District,

but it shall not be a State until after the supreme Federal Powers move to some other place.

ARTICLE 47. The State of Nuevo Léon and Coahuila shall comprise the Territory formerly belonging to the two separate States of which it now consists, except a part of the Bonanza Hacienda, which shall be added to Zacatecas, exactly as it was before its annexation to Coahuila.

ARTICLE 48. The States of Guanajuato, Jalisco, Michoacan, Oaxaca, San Luis Potosi, Tabasco, Vera Cruz, Yucatan, and Zacatecas shall recover the extent and limits which they had on the thirty-first of December, eighteen hundred and fifty-two, with the alterations established in the following Article.

ARTICLE 49. The town of Contepec, now belonging to Guanajuato, shall be annexed to Michoacan. The municipality of Ahualulco, belonging to Zacatecas, shall be annexed to San Luis Potosi. The municipalities of Ojo Caliente and San Francisco de los Adames, belonging to San Luis as well as the towns of Nueva Tlaxcala and San Andrés del Teul, belonging to Jalisco, shall be annexed to Zacatecas. The department of Túxpam shall continue to form a part of Vera Cruz. The canton of Huimanguillo, belonging to Vera Cruz, shall be annexed to Tabasco.

TITLE III

DIVISION OF POWERS

ARTICLE 50. The supreme power of the Federation is divided for its exercise into legislative, executive, and judicial. Two or more of these powers shall never be united in one person or corporation, nor shall the legislative power be vested in one individual.

SECTION I

OF THE LEGISLATIVE POWER

ARTICLE 51. The Legislative Power of the nation shall be vested in a General Congress which shall be divided into two Chambers, one of Deputies and the other of Senators.

PARAGRAPH I

OF THE ELECTION AND INSTALLATION OF THE CONGRESS

ARTICLE 52. The Chamber of Deputies shall be composed of representatives of the nation, elected entirely anew every two years, by the Mexican citizens.

ARTICLE 53. There shall be elected one proprietary Deputy for each sixty thousand inhabitants or fraction over twenty thousand, according to the general census of the Federal District and that of each State and Territory. The population of any State or Territory which is less than that herein fixed will, nevertheless, elect one proprietary Deputy.

ARTICLE 54. For each Representative there shall be elected one substitute.

ARTICLE 55. The election of Representatives shall be indirect in the first degree, and by secret ballot, in the manner which the electoral law shall provide.

ARTICLE 56. Representatives shall have the following qualifications: To be Mexican citizens in the enjoyment of their rights; to be twenty-five years of age on the day of the opening of the session; to be residents of the State or Territory in which the election is held, and not to belong to the ecclesiastical State. Residence is not lost by absence in the discharge of a public office of popular election.

ARTICLE 57. The positions of Deputy and Senator are incompatible with any commission or employment of the Union for which a salary is received.

ARTICLE 58. Proprietary Deputies and Senators, from the day of their election until the end of their term, cannot accept any commission or employment within the nomination of the Federal Executive, to which a salary is attached, without the previous licence of their respective Chambers. The same requisite is necessary for the Substitute Deputies and Senators during service.

(*a*) The Senate shall be composed of two Senators for each State and two for the Federal District. The election of Senators shall be indirect in the first

degree. The Legislature of each State shall declare elected him who shall obtain the absolute majority of the votes cast, or shall choose between those who shall have obtained a relative majority, under the terms prescribed by the electoral law. For each Senator a Substitute shall be elected.

(*b*) The Senate shall be renewed one-half every two years. The Senators chosen for the second class (*en segundo lugar*) shall cease at the end of the first two years, and thereafter the older ones (*y en lo sucesive los más antiguos*).

(*c*) To be eligible as Senator the same qualifications are required as for Deputy, except that of age, which shall be full thirty years on the day of the opening of the sessions.

ARTICLE 59. The Deputies and Senators shall be inviolable for their opinions expressed in the discharge of their functions, and shall never be called to account for them.

ARTICLE 60. Each Chamber shall be the judge of the election of its members, and shall decide any questions which arise in regard thereto.

ARTICLE 61. The Chambers cannot open their sessions nor exercise their trust without the concurrence, in the Senate, of two-thirds, and in the Chamber of Deputies of more than one-half, of the total number of their members; but those present of both Chambers shall convene on the day appointed by law, and compel the attendance of absent members, under the penalties provided by law.

ARTICLE 62. The Congress shall hold two ordinary sessions each year: the first shall begin on the 16th day of September and end on the 15th day of December, but may be prolonged (*prorrogable*) for thirty business days (*dias útiles*); and the second, which may be prolonged for fifteen business days, shall begin on the 1st of April and end on the last day of the month of May.

ARTICLE 63. At the opening of the sessions of the Congress the President of the Union shall be present and make a speech

in which he shall give information of the state of the country. The President of the Congress shall reply in general terms.

ARTICLE 64. Every resolution of the Congress shall have the character of a law or of a decree (*tendrá el carácter de una ley ó decreto*). The laws and decrees shall be communicated to the Executive, signed by the Presidents of both Chambers, and by a Secretary of each of them, and shall be promulgated in this form: "El Congreso de los Estados-Unidos Mexicanos, decreta," "The Congress of the Mexican United States decrees."

PARAGRAPH II

ORIGIN AND FORMATION OF THE LAWS

ARTICLE 65. The right to originate legislation belongs:

i. To the President of the Union.
ii. To the members of Congress.
iii. To the Legislature of the States.

ARTICLE 66. Bills introduced by the President of the Republic, or by the Legislatures or Deputations of the States, shall immediately be referred to the proper Committee. Those introduced by Deputies or Senators shall be subject to the procedure established by the Rules.

ARTICLE 67. Every Bill (*proyecto de ley ó de decreto*) for a law or for a decree which shall be rejected by the Chamber of its origin before passing to the Revising Chamber, cannot be again presented during the sessions of the year.

ARTICLE 68. The second period of sessions shall be devoted, with preference over all other matters, to the making of the necessary appropriations for the support of the Government in the following fiscal year, the levying of the taxes necessary to meet the expenses, and the examination of the accounts of the past year submitted by the Executive.

ARTICLE 69. The day before the last of the first session, the Executive shall present to the Chamber of Deputies the estimates (*proyecto de presupuestos*) for the next following year, and the accounts for the previous year. Both shall pass to a Committee of five Representatives, appointed on the

same day, which shall have the obligation of examining both documents and presenting a report on them, at the second day of the second session.

ARTICLE 70. The framing of laws and decrees may begin indiscriminately in either of the two Chambers, with the exception of Bills concerning loans (*los proyectos que versaren sobre emprestitos*), taxes or duties, or the recruiting of troops, all of which must be first discussed in the Chamber of Deputies.

ARTICLE 71. Every project of law or of decree, the resolution of which does not belong exclusively to one of the Chambers, shall be discussed successively in both, observing the rules of debate in respect of the form, time (*intervalos*), and method of procedure in the discussion and casting of votes.[1]

A. Upon approval of a Bill in the Chamber of its origin, it shall pass for discussion to the other Chamber. If the latter approves it, it shall be remitted to the Executive who, if he has no observations to make, will publish it immediately.

B. Every Bill shall be considered as approved by the Executive, if not returned with his objections (*observaciones*) to the Chamber where it originated, within ten business days (*dias útiles*), provided, that within such term the Congress shall not have adjourned or suspended its sessions, in which event the Bill shall be returned on the first business day on which it is in session.

C. The Bill for a law or decree which has been rejected in whole or in part by the Executive, shall be returned with his objections to the Chamber of its origin. It shall be discussed anew by this Chamber, and if it should be confirmed by an absolute majority of votes, it shall pass again to the Revisory Chamber. If it should be sanctioned by the latter by an absolute majority

[1] The Reglamento de Debates governing both Chambers is that passed December 20, 1897, which went into effect September 1, 1898.

of votes, the Bill becomes a law or decree, and shall return to the Executive for his promulgation. The voting upon a law or decree shall be by roll-call and recorded (*nominales*).

D. If any Bill for a law or decree should be rejected in its entirety by the Chamber of Revision, it shall return to that of its origin with the observations which the former shall have made to it. If upon examination *de novo*, it should be approved by the absolute majority of the members present, it shall return to the Chamber which rejected it, which shall take it again into consideration, and if it should approve it by the same majority, it shall pass to the Executive for the purpose mentioned in fraction *A.*; but if disapproved, it cannot be again presented until the following sessions.

E. If a Bill for a law or decree should be rejected only in part, or modified or amended by the Revisory Chamber, the new discussion in the Chamber of its origin shall be confined solely to the parts rejected, or to the reforms or amendments, without altering in any manner the Articles approved. If the additions or amendments made by the Revisory Chamber should be approved by the absolute majority of the votes present in the Chamber of its origin, the entire Bill shall pass to the Executive for his action under fraction *A.* But if the additions or amendments made by the Revisory Chamber should be rejected by the majority of votes in the Chamber of its origin, they shall return to the former in order that it may take into consideration the reasons of the latter, and if by an absolute majority of the votes present, said additions or amendments should be rejected upon this second revision, the Bill, so far as it shall have been approved by both Chambers, shall pass to the Executive for his action under

fraction *A*. But if the Revisory Chamber should insist, by the absolute majority of the votes present, upon said additions or amendments, the entire Bill cannot be again presented until the following sessions, unless both Chambers concur, by an absolute majority of their members present, that the law or decree shall be enacted with only the Articles approved, and that those added or amended shall be reserved for their examination and vote at the following sessions.

F. In the interpretation, amendment, or repeal (*reforma ó derogación*) of laws or decrees, the same procedure shall be observed as is established for their enactment.

G. Both Chambers shall convene (*residirán*) in the same place, and cannot remove to another, unless they shall previously agree upon such removal (*traslación*) and upon the time and manner of carrying it into effect, designating the same point for the convening of both Chambers. But if the two Chambers agree upon the removal, and differ in regard to the time, manner, or place, the Executive shall end the difference, selecting one of the alternatives (*extremos*) in dispute. Neither Chamber shall suspend its sessions for more than three days without the consent of the other.

H. When the General Congress shall convene in extraordinary sessions, it shall occupy itself exclusively with the object or objects designated in the proclamation convening it; and if it shall not have finished them by the day on which the ordinary sessions should begin, it shall nevertheless adjourn, leaving the pending matters to be treated in the latter.

The Executive of the Union cannot interpose objections (*hacer observaciones*) to the resolutions of Congress, when it prorogues its sessions,

or exercises the functions of an electoral body or of a jury.[1]

PARAGRAPH III

POWERS OF CONGRESS

ARTICLE 72. The Congress has power:

i. To admit new States or Territories into the Federal Union, incorporating them in the nation.

ii. To turn Territories into States when they shall have a population of eighty thousand inhabitants and the necessary elements to provide for their political existence.

iii. To form new States within the limits of the existing ones, for which purpose it shall be necessary: (1) That the fraction or fractions seeking to be erected into a State shall have a population of at least one hundred and twenty thousand inhabitants; (2) That it be proven before the Congress that they possess the elements sufficient to provide for their political existence; (3) That the Legislatures of the States whose territory is involved be heard concerning the convenience or inconvenience of the formation of the new State, and they shall be obliged to render their report within six months, counting from the day that the respective communication was forwarded to them; (4) That the Executive of the Federation be likewise heard, who shall transmit his report within seven days, counted from the date on which he shall be requested for it; (5) That the erection of the new State be adopted by the vote of two-thirds of the Deputies and Senators present in their respective Chambers; (6) That the resolution of the Congress be ratified by the majority of the Legislatures of the States, with a copy of the record before them; provided,

[1] Amendment of November 13, 1874.

that the Legislatures of the States whose territory is involved shall have given their consent; (7) If the Legislatures of the States whose territory is involved shall not have given their consent, the ratification mentioned in the foregoing fraction shall be given by two-thirds of the Legislatures of the other States.[1]

iv. To settle finally the limits of the States, terminating the differences which may arise between them relative to the demarcation of their respective territories, except when the differences are of judicial character.

v. To change the residence of the supreme powers of the Federation.

vi. To legislate in respect to all matters concerning the Federal District and Territories.[2]

vii. To impose taxes necessary to meet the Budget.

viii. To establish the bases upon which the Executive may make loans on the credit of the nation; to approve said loans and to recognize and order the payment of the National Debt.

ix. To enact laws fixing the duties to be levied on foreign commerce, and prevent, by general provisions, onerous restrictions from being established on the commerce between the States.

x. To enact codes of mining and commerce, the latter including banking institutions, obligatory throughout the Republic.[3]

xi. To create or abolish Federal offices, and to fix, increase, or decrease their salaries.

xii. Abolished. See *B.* (of this Article) ii.

xiii. Abolished. See *B.* i.

xiv. To declare war, upon examination of the facts submitted by the Executive.

xv. To regulate the manner in which letters of marque

[1] Frac. iii. of Article 72 as amended by the law of November 13, 1874.
[2] Amendment of October 31, 1901.
[3] Amendment of December 14, 1883.

may be issued; to enact laws according to which the prizes on sea and land shall be adjudged good or bad; and to frame the maritime law of peace and war.

xvi. Abolished. See *B.* iii.

xvii. Abolished. See *B.* iii.

xviii. To raise and maintain the Army and Navy of the Union, and regulate their organization and service.

xix. To make rules for the organization, armament, and discipline of the National Guard, reserving respectively to the citizens who compose it the appointment of the commanders and officers, and to the States the power of instructing it in conformity with the discipline prescribed by said Regulations.

xx. Abolished. See *B.* iv.

xxi. To enact laws in regard to citizenship, naturalization, colonization, emigration, immigration, and the general health of the country.[1]

xxii. To enact laws in regard to general ways of communication, and in regard to posts and post offices; to define, to determine what are the waters under Federal jurisdiction, and to enact laws upon the use and utilization of the same.[2]

xxiii. To establish mints, regulate the value and kinds of the national coin, determine the value of foreign coins, and adopt a general system of weights and measures.

xxiv. To make rules for the occupation and sale of public lands and the prices thereof.

xxv. To grant pardons for offences subject to Federal jurisdiction.

[1] Amendment of October 27, 1908. The present law in regard to citizenship and naturalization is the Ley de Extranjeria of May 28, 1886, herein published. Since the above amendment there has been enacted a general law regulating emigration, immigration, and general health, of February 28, 1909, and the Reglamento del Servicio é Inspección de Immigrantes, of the same date.

[2] Amendment of June 20, 1908.

xxvi. To grant rewards or recompenses for eminent services rendered to the country or to humanity.[1]

xxvii. To extend for thirty working days the first period of its ordinary sessions.

xxviii. To make rules for its internal government, and take the necessary measures to compel the attendance of absent Deputies and punish the faults or omissions of those present.

xxix. To enact the laws governing the General Auditing Department. (See *C.* iii. and *A.* iii.)

xxx. To enact all laws which may be necessary and proper to enforce the foregoing powers and all others granted by this Constitution to the authorities of the Union.

A. The exclusive powers of the Chamber of Deputies are:

(i) To constitute itself into an Electoral College in order to exercise the powers prescribed by law in respect to the election of President and Vice-President of the Republic, Magistrates of the Supreme Court of Justice, and Senators for the Federal District.[2]

(ii) To consider (*calificar*) and decide upon the resignations and leaves of absence of the President and Vice-President of the Republic, and upon the resignations of the Magistrates of the Supreme Court of Justice.[3]

(iii) To oversee by means of an investigating Committee of its own number, the faithful discharge of the functions of the General Auditing Department (*Contaduria Mayor*).

(iv) To appoint the superior officers and other employés of the same.

[1] Amendment of June 2, 1882.

[2] Amendment of May 6, 1904, which for the first time created the office of Vice-President under the present Constitution. The law of May 24, 1904, treats of the functions of the Chamber as an electoral body.

[3] Amendment of May 6, 1904.

(v) To constitute itself a jury of impeachment (*jurado de acusación*) for the higher functionaries mentioned in Article 103 of this Constitution.

(vi) To examine the account which the Executive shall present annually, approve the annual estimates of expenses, and to initiate the taxes (*contribuciones*) which in its judgment should be levied to cover them.

B. The exclusive powers of the Senate are :

(i) To approve the treaties and diplomatic conventions which the Executive may conclude with foreign Powers.

(ii) To ratify the appointments which the President of the Republic may make of Ministers, Diplomatic Agents, Consuls-General, superior employés of the Treasury, colonels and other superior chiefs of the Army and National Fleet, in the terms provided by law.

(iii) To authorize the Executive to permit the departure of national troops out of the limits of the Republic, the passage of foreign troops through the national territory, and the stay of vessels of another Power, for more than one month, in the waters of the Republic.

(iv) To give its consent for the Executive to dispose of the National Guard outside of the respective States and Territories, determining the necessary force.

(v) To declare, when the constitutional Executive and Legislative Powers of a State shall have disappeared, that the case has arisen for appointing a Provisional Governor for it, who shall call elections according to the constitutional laws of such State. The appointment of the Governor shall be

made by the Federal Executive, with the approbation of the Senate, or during its recesses with that of the Permanent Commission. Said official shall not be elected constitutional Governor in the elections which may be held by virtue of the call which he shall issue.

(vi) To settle the political questions which may arise between the Powers of a State, whenever any of them shall apply to the Senate for that purpose, or when by reason of such questions the constitutional order shall be interrupted through a conflict of arms. In such case, the Senate shall declare its judgment, in accord with the General Constitution of the Republic and with that of the State. The law shall regulate the exercise of this and the foregoing powers.

(vii) To constitute itself a Jury of Judgment (*erigirse en jurado de sentencia*) in accordance with Article 105 of the Constitution.

C. Each one of the Chambers may, without the intervention of the other :

(i) Dictate economic resolutions relative to its interior regimen.

(ii) Communicate between themselves and with the Executive, through Committees of its own body.

(iii) Appoint the employés of its clerical force and provide for the internal regulation of the same.

(iv) Issue proclamation (*convocatoria*) for extraordinary elections in order to fill vacancies in its membership.[1]

[1] Amendments of November 13, 1874.

PARAGRAPH IV

OF THE PERMANENT DEPUTATION

ARTICLE 73. During the recesses of the Congress of the Union there shall be a Permanent Committee, composed of twenty-nine members, of whom fifteen shall be Deputies and fourteen Senators, named by their respective Chambers on the eve of the close of the sessions.[1]

ARTICLE 74. The attributes of the Permanent Deputation, besides others conferred in this Constitution, are the following:

i. To give its consent for the use of the National Guard, in the cases mentioned in Article 72, frac. xx.

ii. To issue of its own motion, or on that of the Executive, he being heard in the first instance, the proclamation for the Congress, or only one Chamber of it, to convene in extraordinary session; in both cases the vote of two-thirds of the individuals present being necessary. The proclamation shall state the object or objects of the extraordinary session.[1]

iii. To approve the appointments referred to in Article 85, frac. iii.

iv. To receive the oath of the President of the Republic and of the members of the Supreme Court of Justice in the cases provided by this Constitution.[2]

v. To report upon all unfinished business on the calendars, so that the following Legislature may immediately have material upon which to work.

[1] Amendment of November 13, 1874.

[2] The religious oath was entirely abolished in all matters by the Reform Law of September 25 and October 4, 1873; the first providing that "the simple promise to speak the truth and to fulfil the obligations contracted, shall take the place of the religious oath, with its effects and penalties." The later law prescribes the forms of affirmation (*protesta*) to be taken by the President and other principal officials. The effective words are: "Yo protesto." This affirmation is called "la protesta de ley."

SECTION II

EXECUTIVE POWER

ARTICLE 75. The exercise of the supreme Executive Power of the Union is vested in a single individual, who shall be called " President of the United Mexican States."

ARTICLE 76. The election of President shall be indirect in the first degree, and by secret ballot, in such manner as may be prescribed by the electoral law.

ARTICLE 77. In order to be President it is required to be: a Mexican citizen by birth, in the exercise of his rights, or thirty-five years of age completed at the time of the election, to belong to no ecclesiastic order (*estado*), and to reside in the country at the time of the election.

ARTICLE 78. The President and the Vice-President of the Republic shall enter upon the exercise of their functions on the 1st of December, and shall continue in their office six years.[1]

ARTICLE 79. The electors who choose the President of the Republic shall also, on the same day and in the same manner, elect as Vice-President a citizen having the same qualifications (*en quién concurran las condiciones*) as required for President by Article 77.

The Vice-President of the Republic shall be President ex officio (*nato*) of the Senate, with the right of debate (*con voz*), but without a vote, except in cases of a tie (*en caso de empate*). The Vice-President may, however, hold any other office (*desempeñar algún encargo*) within the appointment of the Executive, and in such event, as well as when he is otherwise in default (*lo mismo que en sus otis faltas*), shall be substituted in the Presidency of the Senate in the manner in which may be prescribed by law.[1]

ARTICLE 80. When the President of the Republic shall not be present on the day designated by law to take possession of his office, when he shall be in absolute default, or when leave is granted him to withdraw from his functions, the Vice-President

[1] Amendment of May 6, 1904. A recent amendment excludes the President from a second consecutive term of office.

of the Republic shall assume the exercise of the Executive Power, by virtue of law (*por ministerio de la ley*) without the necessity of a new protest.

If the default of the President shall be absolute, the Vice-President shall substitute him until the end of the term for which he was elected, and in the other cases until the President shall present himself to discharge his functions.

ARTICLE 81. If at the beginning of a Constitutional term, neither the President nor Vice-President elect shall present himself, or if the election should not be held and declared on the 1st of December, the President whose term has expired shall nevertheless cease to act, and the Secretary of State for Foreign Relations shall at once assume the Executive Power in the character of President *ad interim*, and if there should be no such Secretary, or if he should be prevented from doing so, one of the other Secretaries, following the order of the law which establishes their number. The same procedure shall be observed where, in case of the absolute or temporary default of the President, the Vice-President does not present himself; when leave shall be granted him to withdraw from his functions, if he be discharging them, and if in the course of a term, an absolute default of both functionaries should occur.

In the event of the absolute default of the President and of the Vice-President and Congress of the Union, or during its recesses, the Permanent Committee shall at once issue a call for extraordinary elections.

When the default of one and the other functionary shall occur in the last year of a term, such call shall not be made, but the Secretary who is exercising the Executive Power shall continue in its exercise until possession is taken by the new President, or by the person who substitutes him in accordance with the foregoing precepts.

The citizens chosen in the extraordinary elections shall take possession of their offices immediately upon the announcement of the results, and shall exercise them for the time which remains until the expiration of the Constitutional period.

When one of the Secretaries of State shall assume the

Executive Power, he shall exercise it without the necessity of protest, until he makes it (*entretanto la otorga*).[1]

ARTICLE 82. The office of President and Vice-President of the Republic can only be resigned for grave cause, which shall be passed upon by the Chamber of Deputies, before which the resignation shall be presented.[1]

ARTICLE 83. The President, upon taking possession of his office, shall make before the Congress, or in its recesses before the Permanent Committee, the following affirmation (*protesta*): "I affirm (*protesto*) without any reservation that I will keep and cause to be kept (*guarda y hacer guarda*) the Political Constitution of the Mexican United States, together with its additions and amendments, the Laws of the Reform, and all others which shall be enacted in pursuance thereof (*que de aquella amanen*), and that I will discharge loyally and patriotically the office of President of the Republic which the people have conferred on me, in all things looking to the welfare and prosperity of the Union."

The Vice-President shall make the affirmation at the same session, in like terms, to discharge the Vice-Presidency, and if the event occurs, the Presidency of the Republic; but if he should be prevented from making the affirmation at the session, he shall make it at another.[1]

ARTICLE 84. The President and the Vice-President of the Republic cannot absent themselves from the national territory without the permission of the Chamber of Deputies.[1]

ARTICLE 85. The powers and duties of the President are the following:—

i. To promulgate and execute the laws passed by the Congress of the Union, providing within the Executive sphere, for their exact observance.

ii. To appoint and remove freely the Secretaries of State, to remove the Diplomatic Agents and superior officers of the Treasury, and to appoint and remove freely the other Federal officials whose appointment or removal is not otherwise provided for in the Constitution of the laws.

[1] Amendment of May 6, 1904.

iii. To appoint with the approval of Congress, and, in its recess, of the Permanent Committee, Ministers, Diplomatic Agents, and Consuls-General.

iv. To appoint with the approval of Congress, Colonels and other superior officers of the National Army and Navy, and superior officers of the Treasury.

v. To appoint all other officers of the National Army and Navy according to the laws.

vi. To dispose of the permanent land and sea forces for the security and defence of the Federation.

vii. To dispose of the National Guard for the same purposes, in the manner provided by Article 72, clause xx.

viii. To declare war in the name of the United Mexican States, after the passage of the necessary law by the Congress of the Union.

ix. To grant letters of marque, upon the bases fixed by the Congress.

x. To conduct diplomatic negotiations and to make treaties with foreign Powers, submitting them for ratification to the Federal Congress.

xi. To receive Ministers and other envoys from foreign Powers.

xii. To call, upon resolution of the Permanent Committee, an extra session of Congress.

xiii. To give the Judicial Power the assistance which may be necessary for the free exercise of its functions.

xiv. To open all classes of ports, establish maritime and frontier custom-houses and designate their location.

xv. To grant, according to law, pardons to criminals sentenced for offences within the jurisdiction of the Federal tribunals.

xvi. To grant exclusive privileges for a limited time, and in accordance with the laws, to discoverers, inventors, or to the improvers of any branch of industry.[1]

ARTICLE 86. For the transaction of the business of the Executive Department of the Federation there shall be the number of Secretaries which the Congress may fix by law, said

[1] Amendment of June 2, 1882.

law to provide also for the distribution of business among the different Secretaries.

ARTICLE 87. No person shall be appointed Secretary who is not a Mexican citizen by birth, in the exercise of his rights, and twenty-five years old.

ARTICLE 88. All rules, decrees, and orders of the President shall be signed by the Secretary of the Department to which the subject belongs. Without this requisite they shall not be obeyed.

ARTICLE 89. The Secretaries shall, as soon as the sessions of the first period are opened, render an account to the Congress of the state of their respective Departments.

SECTION III

JUDICIAL POWER

ARTICLE 90. The Judicial Power of the Federation is vested in a Supreme Court and in the District and Circuit Courts.

ARTICLE 91. The Supreme Court of Justice shall be composed of fifteen members, who shall sit *en Banc* or in Divisions, (*funcionará en Tribunal pleno ó en Salas*), in the manner prescribed by law.[1]

ARTICLE 92. The Justices of the Supreme Court shall serve for six years, and their election shall be indirect in the first degree, in the manner established by the electoral law.

ARTICLE 93. No person shall be eligible to the position of Justice of the Supreme Court who, in the judgment of the electors, is not learned in the science of law, thirty-five years of age, and a Mexican citizen by birth, in the exercise of his rights.

ARTICLE 94. The Justices of the Supreme Court shall, on entering upon the exercise of their functions, take an oath before Congress, and, in its recesses, before the Permanent Committee, in the following form: "Do you swear to perform loyally and patriotically the functions of Justice of the Supreme Court of Justice, which the people have conferred upon you, in conformity with the Constitution, having always in view the welfare and prosperity of the Union?"

[1] Amendment of May 22, 1900.

ARTICLE 95. No resignation of the position of justice of the Supreme Court shall be admitted except for grave cause, approved by the Congress, to whom the resignation shall be tendered. In the recesses of the Congress power to act on this matter belongs to the Permanent Committee.

ARTICLE 96. The law shall establish and organize the circuit and district courts, and the Ministerio Público of the Federation. The officials of the Ministerio Público and the Attorney-General (Procurador-General) of the Republic, who shall be its principal officers, shall be appointed by the President.[1]

ARTICLE 97. The Federal tribunals shall take cognizance of:

i. All controversies which may arise in regard to the compliance with and application of the Federal laws, except in the case that such application only affects the interests of private persons, in which event the local judges and tribunals of the common order of the States of the Federal District and of the Territory of Lower California shall be competent to hear and decide them.[2]

ii. All cases pertaining to maritime law.

iii. All cases to which the Federation may be a party.

iv. All cases which may arise between two or more States.

v. All cases which may arise between a State and one or more citizens of another State.

vi. All civil or criminal cases that may arise out of treaties with foreign powers.

vii. All cases concerning diplomatic agents and consuls.

ARTICLE 98. The Supreme Court shall have original jurisdiction of controversies which may arise between one State and another, and of those to which the Union may be a party.

ARTICLE 99. The Supreme Court shall also have power to settle questions of jurisdiction between Federal tribunals, between these tribunals and those of the States, or between those of one State and those of another.

ARTICLE 100. In all the other cases mentioned in Article 97,

[1] Amendment of May 22, 1900. [2] Amendment of May 29, 1884.

the Supreme Court shall be either a court of appeals or a court of last resort, as may be defined by the law regulating the jurisdiction of the circuit and district courts.

ARTICLE 101. The tribunals of the Federation shall decide all questions arising out of:

i. Laws or acts of whatever authority violating individual guarantees.

ii. Laws or acts of the Federal authority encroaching upon or restricting the sovereignty of the States.

iii. Laws or acts of the State authorities invading the sphere of the Federal authority.

ARTICLE 102. All the cases referred to in the preceding Article shall be conducted, on petition of the aggrieved party, according to rules of proceedings which a special law shall establish. The decision shall always be rendered in such a language as exclusively to affect the individuals concerned in the case, limiting itself to defend and protect them in the special case to which the proceedings refer, without making any general declaration respecting the law or the Act which gave rise to the case.

TITLE IV

RESPONSIBILITY OF THE PUBLIC FUNCTIONARIES

ARTICLE 103. The Senators and Deputies to the Congress of the Union, the Magistrates of the Supreme Court of Justice, and the Secretaries of the Departments, are responsible for the common crimes which they may commit during their terms of office, and for the crimes, defaults, and omissions of which they may be guilty in the exercise of their offices. The Governors of the States are responsible for the infraction of the Constitution and Federal laws. The President and Vice-President of the Republic, during the term of their office, can only be accused of treason to the country by express violation of the Constitution, attack on the freedom of elections (*ataque á la libertad electoral*), and grave crimes of common order.[1]

The high officials of the Federation do not enjoy any

[1] Amendment of November 13, 1874, and May 6, 1904.

constitutional privilege (*fuero*) on account of the official crimes, defaults, or omissions of which they are guilty in the discharge of any public employment, office, or commission which they accepted during the time such privilege is enjoyed according to law. The same is true in respect to common crimes which they may commit during the discharge of said employment, office, or commission. In order that the cause may be begun when the high official returns to exercise his functions, the procedure prescribed in Article 104 of the Constitution must be followed.[1]

ARTICLE 104. If the crime should be a common one, the Chamber of Deputies, acting as a grand jury, shall declare, by an absolute majority of votes, whether or not there is sufficient ground to proceed against the accused. In the negative case, there shall be no ground for further proceedings; in the affirmative, the accused shall be, by the said Act, deprived of his office, and subjected to the action of the ordinary tribunals.[1]

ARTICLE 105. Official crimes shall be cognizable: by the Chamber of Deputies as a Jury of Accusation, and by that of the Senators as a Jury of Sentence. The Jury of Accusation shall have for its object to declare, by an absolute majority of votes, whether the accused is or is not guilty. If the declaration is favourable (*fuere absolatoria*), the official shall continue in the exercise of his office; if it be condemnatory, he shall be immediately removed from said office and shall be placed at the disposition of the Chamber of Senators, which, resolved into a Jury of Sentence, and after hearing the defendant and the accuser, if there be one, shall proceed to apply, by an absolute majority of votes, the penalty which the law designates.[1]

ARTICLE 106. In cases of impeachment, no pardon can be granted to the offender.

ARTICLE 107. The responsibility for official crimes and misdemeanours can only be enforced during the period in which the functionary remains in office, and one year thereafter.

[1] Amendment of November 13, 1874.

ARTICLE 108. In civil cases no privilege or immunity in favour of any public functionary shall be recognized.

TITLE V

STATES OF THE FEDERATION

ARTICLE 109. The States shall adopt for their internal regime the popular, representative, republican form of government, and they may provide in their respective Constitutions for the re-election of the Governors, in accordance with the provisions of Article 78 in regard to the President of the Republic.[1]

ARTICLE 110. The States shall have the power to fix among themselves, by friendly agreements, their respective boundaries; but those agreements shall not be carried into effect without the approval of the Congress of the Union.

ARTICLE 111. The States cannot in any case:

i. Enter into alliances, treaties, or coalitions with another State, or with foreign powers. Coalitions between frontier States for offensive or defensive war against savage Indians are expected.

ii. Grant letters of marque or reprisal.

iii. Coin money, issue paper money, stamps, or create stamped paper.

iv. Tax (*gravar*) the passage of persons or things which pass through their territory.[2]

v. Prohibit or tax, directly or indirectly, the entry into their territory nor the leaving it of any national or foreign merchandise.

vi. Tax the circulation or the comsumption of national or foreign goods, with imposts or duties, the exaction of which is effected through local customs-houses, or requires the inspection or examination of packages, or requires any documents to accompany the merchandise.

[1] Amendment of October 21, 1887.

[2] This amendment of May 1, 1906, was the final step in the abolition of the Inter-State customs tax called alcobala, which was a very serious restriction of internal commerce and a grievous abuse.

vii. Enact or enforce laws or fiscal dispositions which produce differences of taxation (*impuestos*) or requirements on accounts of the origin of national or foreign merchandise, whether such difference is established because of (*respecto de*) the similar production of the locality, or between like productions of different origin (*procedencia*).

viii. Issue evidences (*titulos*) of public debt payable in foreign money or outside of the national territory; contract, directly or indirectly, loans with foreign Governments; or contract obligations in favour of Corporations, or individuals of foreign nationality, when it is necessary to issue for such purpose documents payable to the bearer or transferable by endorsements.[1]

ARTICLE 112. Neither can they, without the consent of the Congress of the Union:

i. Establish tonnage duties or any port duty, or impose taxes or duties upon imports or exports.

ii. Have at any time permanent troops or vessels of war.

iii. Make war by itself on any foreign power, except in cases of invasion or of such imminent peril as to admit of no delay. In these cases the State shall give notice immediately to the President of the Republic.

ARTICLE 113. Each State is bound to deliver without delay, to the authority which may claim them, the fugitives from justice of other States.

ARTICLE 114. The Governors of the States are bound to publish and enforce the Federal laws.

ARTICLE 115. In each State of the Federation entire faith and credit shall be given to the public acts, records, and judicial proceedings of all the other States. The Congress may, by means of general laws, prescribe the manner of proving said acts, records, and proceedings, and the effect thereof.

ARTICLE 116. The Federal Government is bound to protect the States against all invasion or external violence. In case of insurrection or internal disturbance, it shall give them the

[1] Amendment of May 1, 1896.

same protection, provided that the Legislature of the States, or the Executive, if the Legislature is not in session, shall request it.

TITLE VI

GENERAL PROVISIONS

ARTICLE 117. The powers which are not expressly granted by this Constitution to the Federal authorities are understood to be reserved to the States.

ARTICLE 118. No person shall hold at the same time two Federal elective offices; but if elected to two, he may choose the one which he may prefer.

ARTICLE 119. No payment shall be made which is not included in the budget or authorized by a law subsequent to the same.

ARTICLE 120. The President of the Republic, the justices of the Supreme Court, the members of Congress, and all other public officers of the Federation, who are chosen by popular election, shall receive a compensation for their services, which shall be determined by law and paid by the Federal treasury. This compensation cannot be waived, and any law which may increase or decrease it shall not have effect during the period for which a functionary holds the office.

ARTICLE 121. Every public officer, without any exception, before entering on the discharge of his duties, shall take an oath to maintain this Constitution and the laws emanating from it.

ARTICLE 122. In time of peace no military authority shall exercise other functions than those having close connexion with military discipline. No fixed and permanent military offices shall be established except in castles, fortresses, and arsenals depending immediately upon the Government of the Union, or in camps, barracks, or depots established outside of towns for stationing troops.

ARTICLE 123. The Federal authorities shall have exclusive power to exercise, in matters of religious worship and external ecclesiastic discipline, the intervention which the laws may authorize.

ARTICLE 124. It is the exclusive right (*facultad privativa*) of the Federation to tax the merchandise which is imported or exported, or which passes in transit through the national territory, as well as to regulate at all times, and even to prohibit, for reasons of safety or police, the circulation in the interior of the Republic of every class of effects, whatever may be the place from which they come (*su procedencia*): provided that the Federation itself cannot establish or enact (*dicta*) in the District and Federal Territories the taxes and laws mentioned in fractions vi. and vii. of Article 111.[1]

ARTICLE 125. The forts, barracks, warehouses, and other real properties destined by the Government of the Union to the public service and common use shall be subject to the jurisdiction of the Federal Powers in the terms established by the law which the Congress of the Union will issue; but in order that those hereafter acquired within the territory of any State may be likewise under Federal jurisdiction, the consent of the Legislature of such State shall be necessary.[2]

ARTICLE 126. This Constitution, the laws of the Congress of the Union emanating therefrom, and all the treaties made or to be made by the President of the Republic, with the approval of Congress, shall be the supreme law of the whole Union. The judges of each State shall be guided by said Constitution, laws, and treaties, any provision to the contrary in the constitutions or laws of the States notwithstanding.

TITLE VII

AMENDMENTS TO THE CONSTITUTION

ARTICLE 127. The present Constitution may be amended. No amendment shall become part of the Constitution if not agreed upon by the Congress of the Union by a vote of two-thirds of the members present and approved by a majority of the Legislatures of the States. The Congress of the Union shall count the votes of the Legislatures and make the declaration that the amendments have been adopted.

[1] Amendment of May 1, 1896. [2] Amendment of October 31, 1901.

TITLE VIII

INVIOLABILITY OF THE CONSTITUTION

ARTICLE 128. This Constitution shall not lose its force and vigour even if its observance is interrupted by a rebellion. In case that by any public disturbance a Government contrary to the principles which it sanctions is established, its efficiency shall be restored as soon as the people regain their liberty, and those who shall have figured in the Government emanating from the rebellion, or have co-operated with it, shall be tried in accordance with its provisions, and the provisions of the laws emanating from it.

TRANSIENT PROVISION

The present Constitution shall be published at once and sworn to with the greatest solemnity throughout the whole Republic; but its provisions, except those relating to the election of the supreme powers, Federal and State, shall not go into effect until the 16th of September next, when the first Congress under the Constitution shall meet. On and after that date the President of the Republic and the justices of the Supreme Court, who shall continue in the exercise of their functions until their successors are constitutionally elected and enter into the discharge of their duties, shall act in strict accordance with the provisions of this Constitution. The end of the original Constitution was as follows :—

Given at the Hall of Sessions of Congress in the City of Mexico on the fifth of February eighteen hundred and fifty-seven, the thirty-seventh of the Independence.

INDEX

Agriculture, 183, 259
Aguamel, 129
Aguas Calientes, 3
Alamo, 41
Aldama, 24
Allende, Captain, 24, 25
Allende, San Miguel de, 15
Almoloyan dam, 192
Alvarado, 9, 10
American Consul-General, 156
Americans in Mexico, Mexican dislike of, 175
Anson, 16
Apaches, 2, 14
Apam, 130
Arista, General, 43
Arizona, 66
Arms, traffic in, 136, 143
Army, 96, 98, 292; increase of pay, 179; reduction of, 179; Señor Sala's suggestion, 180
Arts, ancient, 104, 105
Athapascan, 2
Atoyac River, 217
Austin, Moses, 40
Austria, 51, 56, 60
Azcapatzalco, 4
Aztecs, 1, 2, 7, 17, 88; Calendar Stone, 274

Balsas River, 70
Banana plantations, 110, 236, 237, 239; method of planting, 237
Banks, 264
Barca, Madame Calderon de la, 34, 154
Bazaine, Marshal, 54, 58
"Bell of Independence," 24
Benefit of the clergy, 46
Bonaparte, Joseph, 21
Bonsal, Mr. Stephen, 289, 290
Bougainvilla, 79
Bravo, Nicolas, 38
Bread Riots, 15
Brigandage, 61, 145, 296
Bryan, Mr., 293
Buccareli, Antonio de, 13
Buchanan, President, 49
Bull-fights, 126
Bustamente, Antonio, 39, 154

Cabinet woods, 185, 240
Cactus, 83, 126
Cadets, 155
California, 66
California, Gulf of, 67
Campechê, Bay of, 74
Canada, 9
Caribbean Sea, 16
Carranza, 137, 170
Carranzistas, 136
Carrera, 45
Casafuerte, Marquis de, 13
Casas, Fray Bartolomé de las, 14
Cathedral (Mexico City), 18, 30, 273, 274
Catholic Church, 12, 18, 21, 116
Catholics, 47
Cavendish, 16
"Caviare," Mexican, 75
Central America, 16
Centralists, 33, 45
Cereals, 80, 84
Cerro Gordo, battle of, 42.
Chapala, Lake, 70, 75
Chapultepec, Castle of, 43
Charlotte, Empress, 56, 58
Chiapanecan, 2.
Chiapas, 79
Chichimecs, 1, 132
Childs, Colonel, 42
Chilpancingo, 73
Chinantecan, 2
Cholula, 4
Church disestablishment, 117
Church lands, 46, 56
Ciduadela, 149, 154
Civil War, United States, 57
Clerical Revolution, 60
Clericals, 46, 55, 57, 58, 59
Coahuila, 62
Coahuiltecan, 2
Coal, 185
Coatzacoalcos Rio, 70, 227
Colima, 67
Colima Volcano, 72

Colonial Period (Mexico), 12, 18
Colorado, 66
Commercial prospects, 189
Comonfort, President, 32, 44, 46
Confederate leaders, United States, 53
Congress, 30, 35, 36, 39, 49, 91
Conquest of Mexico, 13, 18
Constitution, 90, 134
Cordillera de Anahuac, 67
Cordoba, Treaty of, 29, 54
Cortes, 1, 3, 5, 6, 9, 10, 14
Cotton-spinning, 213; Puebla factories, 217, 218, 219
Council of the Indies, 12
Courts of Justice, 93
Creoles, 19
Crops, grown in Mexico, 184
Cuatla, 28
Cuba, 9, 20
Cuernavaca, 153
Cuitlahuac, 4
Currency and coinage, 265, 266

Dampier, 16
De la Barra, Señor, 163
De Saligny, French Minister, 55
del Rey, General, 27
Democratic Club programme, 161
Deputies, Chamber of, 90, 115
Diaz, General Felix, 22, 143, 145, 153; character of, 172
Diaz, President, 17, 31, 44, 54, 56, 60, 65, 134, 139, 159, 163
Dominicans, 19
Drainage canal, 17
Drake, 15
Draper, Dr., 51, 52
Drapery, 189
Dry season, 80
Durango, 15
Duval, Dr., 48
Dyewoods, 15

Eagle Oil Co., 227, 228
Economics, singular theory, 213, 214
Egloffstein, 74
El Hule, 238
El Oro, 69
Elections, 140, 141, 142, 169
Electrical undertakings, 191; development, 195; transmission, 198, 205
Emigrants, 124
Emperor Francis Joseph, 55
Empress Eugénie, 50
Engineering, School of, 18
England, 53, 54
English residents in Mexico, attitude of Mexicans, 174
Eucador, 50
European Powers, recognition of General Huerta, 173

Fauna, 81, 82, 83
Federal district, 31, 88; Republic, 64
Federalists, 33
Ferdinand VII, 21, 29
Flandrau, Mr. Chas. Macombe, 119
Flour mill, first, in America, 219
Foreign enterprise, 169, 178; Government protection, 178, 182
Foreign relations, 280; attitude of United States, 281, 282, 283; parties in U.S., 285
Forests, 84
Forey, General, 54, 55
Fomento, Department of, 44
France, 40, 50, 51, 53, 54
Franciscans, 13, 38
Freemasons, 38
French Revolution, 21
Fresnillo, 15
Fruit-growing, 183, 184, 235; citrus fruits, 236

Gadsden Treaty, 65, 66
Galvan, Mariano, 24, 25
Garibay, Pedro, 22
Gelves, Marquis de, 18
Geological formation, 77
Gila River, 65
Gold and silver production, 187
Great Britain, 16, 51, 54
Grenaditas, 25, 27
Grito de Dolores, 23
Grocery and provision trade, 189
Guadalajara, 43, 48
Guadalupe, 17, 24, 25
Guadalupe-Hidalgo Treaty, 65
Guanajuato, 25, 27
Guatemala, 7, 50, 66
Guchapines, 22
Guerrero, Vincentes, 28, 39, 72

Hacendadoes, 83, 111
Haciendas, 111
Hardware trade, 189
Hawkins, 15, 16
Herrera, President, 41, 43
Hidalgo, Father Miguel, 21, 23, 24, 25, 26, 27, 29
Hill of Bells (Cerro de las Campañas), 60
Honduras, 1, 66

House of Hapsburg, 51
Houston, General Sam, 41
Huavan, 2
Huerta, General, 31, 65, 92, 143, 293, 294
Huitzilopochtli, 5, 6, 10
Humboldt, 74

Iguala, Plan of, 29, 30, 35
Independent Mexico, 28, 31
Indians, 22
Industries, 209
Inquisition, 28
Islands of Mexico, 75
Iturbide, General de, 28, 29, 31, 34, 36, 44
Iturrigaray, Señor José de, 21, 22
Ixtaccihuatl, 67, 68, 73

Jalapa, 34, 35, 80
Jalisco, 71
Jecker, 50, 51
Jefe Politico, 94, 100, 123
Juanacatlan, 70
Juarez, President, 18, 31, 32, 33, 44, 46, 47, 48, 49, 50, 51, 59, 60
Jute mill, Santa Gertrudis, 215; output, 223; number of spindles, 224; wages, 224
Jute-spinning, 213

La Bastida, Archbishop, 55
Labour, 111
Lagoons, coastal, 74
Lakes, drainage of, 17
Land problems, 125
Lane, General, 43
"La Noche Triste," 9, 11
Latin-American States, 33
Laurent, 16
Learned professions, 189
Legal peculiarities, 205, 206
Legislation, character of, 171
Legislature, 138
Lerdo, Michael, 46, 60
Lerma River, 69, 75
Liberals, 46
Limantour, Señor, 61, 248
Lizana, Archbishop, 21, 22
Lopez, Colonel, 59
Lotteries, 126
Louisville Courier-Journal, 289

Machete, 130
Macineso plantation, 239
Maderistas, 170
Madero, Francesco I., 31, 61, 65, 114, 153, 162; railway accident, 251
Maguey, 128
Mails, destruction of, 174
Malinche Mountain, 72
Manilla Galleon, 16
Marriage, 112, 120, 122
Maximilian, 17, 32, 54, 55, 60
Maya, 1, 62
Mayan, 2
Mescal, 127
Mestizos, 21, 22, 23, 33
Metlac Bridge, 224
Mexican bishops, 28
Mexican Federation, 28
Mexican Herald, 123, 151
Mexican ideas of government, 171
Mexican independence, 20
Mexican Light & Power Co., 180; statistics, 208
Mexican Railway Co., 253
Mexican Republic, 36, 53, 86
Mexico, internal conditions; probability of annexation by United States, 286; U.S. intervention, 287, 290, 291, 292, 297; U.S. financial interests in, 287; European interests in, 287; chronic disorders, 288; financial stability, 279
Mexico, Archbishop of, 18, 46, 50
Mexico, area of, 64
Mexico City, 2, 5, 8, 26, 28, 29, 34, 36, 44, 47, 56; lighting of, 207, 268, 270; police force, 271
Mexico, Gulf of, 16, 67
Mexico, origin of, 103
Mexico, State of, 17
Mexico Tramways Co., 248, 276, 277
Mexico, Valley of, 1, 8, 16, 68, 88
Mendoza, Antonio de, 13, 14
Michoacan, 72
Minatitlan, 70, 229
Mineral wealth, 78, 185
Minerals, 15
Mining, American enterprise, 189
Mining region, 186
Miramar, General, 48, 50, 60
Mixtec tribe, 109
Monroe Doctrine, 36, 39, 51, 57, 288, 293
Monroe, President, 37
Monte de la Cruces, 26
Montezuma, 9
Morals, Mexican, 118
Morelia, 26
Morelos, José Maria, 21, 28
Morelos State, 3; arrest of legislature, 177; sugar haciendas, 178

Napoleon III. 51, 52, 54, 57, 58
National Museums, 6
National Palace, 23, 43
National railways of Mexico, 245, 253, 254, 255
Nauhuatl, 2
Necaxa, 69, 75, 191; dam, 192; falls, 194; power-house, 199; gorge, 200; beauty of, 201, 210, 211; railway, 209, 210; President Diaz, visit to, 212
Nevada, 60
New Spain, Viceroy of, 12
North-Western Railway, 249
Northern States, 89, 170
"Northers," 76, 81
Novella, Francesco de, 22
Nuevo Leon, 62

Oaxaca, 3, 44, 70
O Donoju, General Juan, 12, 22, 29
Oil, ancient wells, 227; recent developments, 227; Tampico district, 230, 231
Oilfields, production, 186, 190, 226; San Cristobal, 228
Orizaba, 54, 67, 69, 72, 222
Otomian, 2

Pachua, 49
Pacific coast, 16, 48
Pacific States, 89
Panama, 7, 9
Panuco, Rio, 70
Papaloapam, Rio, 70
"Pastry War," 40
Patriotism, Mexican, 137
Peace and order, necessities of, 172
Pearson & Son, Messrs. S., 17, 77, 230
Peons, 111, 113
Personal rule, acceptable to Mexicans, 173
Philip IV, 19
Philippines, 16
Piman, 2
Pius IX, 47, 56, 58
Poincette, Joel, 38
Police, 97
Politics, 118
Popocatapetl, 67, 68, 73
Portugal, 43
Prescott ("Conquest of Mexico"), 5, 9
Presidency, candidates for, 165
President, powers of, 91, 92
Progresso, 77
Puebla, Bishop of, 19, 46
Puebla City, 34, 38, 42, 43, 54, 55, 215, 216; architecture, 216; theatre, 216; religious character of, 216; battles at, 217
Puebla Light & Power Co., 188, 221
Puenta de Calderon, 28
Puerto Mexico, 70, 228, 229
Pulque, 5, 126, 127, 128, 129
Pulquerias, 129

Querétaro, State of, 24, 48, 59
Quichés, 7
Quintano Roo, 77

Railways, 243, 244, 245; Government policy, 245; first in Mexico, 246; Commission, 255
Rainy season, 80
Rebel atrocities, 171, 176
Rebels, American sympathisers with, 176
Recruiting, 98
Reform Laws, 33
Reform, War of, 49, 57
Religions, ancient, Aztec, 108
Resources, development of, 182, 189
Revillagigelo, Conde de, 13
Revolt of Feb. 1913, 147, 148, 149, 156, 157, 166, 167
Reyes, General Bernardo, 62, 146, 149, 176
Rio Blanco, 219; electric power-house, 220, 221
Rio Colorado, 65
Rio Grande, 2, 41, 51, 65, 69
Rivera, Fray Paya Enriquez de, 13
Rooseveldt, President, 288
Rurales, 62, 97

Sacrificial stone, 276
Sacrificios, island of, 16
Salina Cruz, 76
Salt, 78; deposits of, 228
San Diego Bay, 65
San Jacinto River, 41
San Juan de Ulua, 22, 30, 40
San Lazaro, 14, 17
San Luis Potosi, 3, 15
Santa Anna, General de, 29, 32, 34, 39, 40, 42, 44
Scott, General, 42
Secretaries of State, 92
Senate, 91
Seri Indians, 2, 102
Servants (Mexican), 273
Sevan, 16
Seward, Mr., 57

Sheridan, General Philip, 57
Sierra Madre, 3
Sierra Madre, Occidental, 67
Sierra Madre, Oriental, 67
Silao, 15, 62
Sinaloa, 3
Sisal fibre, 89
Slavery, 37, 49
Social reform, 170
Sombrerete, 15
Sonora, 2
Southern Confederacy (U.S.), 57
Southern Pacific Railway, 248
Spain, 20, 21, 51, 54
Spanish Crown, 13
Spanish Government, 28, 29
Spanish Main, 15
Spanish Minister, 50
States, list of, 86, 87; government of, 94; powers of, 95
Stock-raising, 183, 241
Suarez, 146

Tabasco, 3
Tacubaya, 48; plan of, 32, 48
Tamaulipas, 34, 62
Tampico, 39, 70
Tañoan, 2
Tarascan, 2
Taylor, General Zachary, 41
Tehuacan, 54
Tehuantepec, Isthmus of, 66, 70, 72; national railway, 229, 245, 246; scenery, 230, 231; geographical advantages, 231
Tenajocan, 4
Tenango dam, 76; River, 193
Tendilla, Conde de, 13
Tenochtitlan, 3
Teocalli, 6
Tepatate, 192
Tequila, 127
Tequistlatecan, 2
Territories, 90
Texas, 40, 41, 66; annexation of, 41
Texcuco, 4, 11, 17, 68
Textile machinery, 215
Textla Volcano, 73
Tiburon, 2
Tierra Caliente, 64, 68, 74, 79
Tierra Templada, 79
Tierra Tria, 79
Tinto Rio, 70
Tlascalans, 89
Toltecs, 1, 2, 8, 132
Toluca, 39, 69
Tortillas, 126, 240
Totonacan, 2
Trade and commerce, 257, 258, & 259; ancient trade route, 261; influence of railways, 261; statistics, 262, 263
Trafficking with rebels, 174
Trans-Isthmian Railway, 70
Treasury (loss of funds), 164
Treaty of Utrecht, 16
Triple Alliance, 54
Tuxpan, 74; harbour, 232, 233

United States, 27, 35, 40, 41, 43, 58, 59, 65, 69, 135; refusal to recognise Huerta Government, 173; attitude of Mexican people towards, 173
United States of Mexico, 35; first President of, 36, 60; Congress, 42; unsettled conditions, cause of, 172

Valesco, Conde de, 13, 14
Van Horn, 16
Vanilla, 5
Vaquie, Dr., 194
Venegas, Francisco Javier, 22
Vera Cruz, 1, 3, 10, 16, 22, 34, 40, 42, 43, 56; Harbour, 225; sanitation, 225; railway facilities, 225; trade, 226
Viceroy, 22, 26

Wages, 125
War of Independence, 21
War, Guerrilla, 293
Washington, 41, 58
Water power, 187; statistics, 197; utilization of, 199; conservation, 193; Tuxpango installation, 221, 222
Wilson, President, 281, 282, 283, 284, 293, 294, 295; attitude towards General Huerta, 285
Wilson, Mr. H. L., 153, 284
Woodes Rogers, 16
Working classes, 125
Workmen, Mexican, 110, 203, 260
Worswick, Mr., 215, 222
Writing, ancient methods, 107

Xalpan, 17
Ximenez, Father, 7
Xochimilco, 4

Yaquis, 2, 14, 62, 70
Yucatan, 1, 62, 67
Yuman, 2

Zacatecas, election, 115
Zapata, 153; relations with President Madero, 177; in Morelos, 177
Zapotecan, 2
Zocalo, 149, 156 (Mexico City), 268
Zoquean, 2
Zuloaga, President, 48
Zumarraga, Bishop, 15
Zumpango, 17

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